USER'S MANUAL

LABORATORY RANGE

910 / 1300 / 1400 / 1600

UP – UPDP - UPSS - UPDPSS

MODELS

910 UP / UPDP / UPSS / UPDPSS
1300 UP / UPDP / UPSS / UPDPSS
1400 UP / UPDP / UPSS / UPDPSS
1600 UP / UPDP / UPSS / UPDPSS

910 UP

1300 UPSS

Pictures and drawings non contractual.
LANCER reserves the right to make changes in this manual

LANCER

PRECAUTIONS TO BE TAKEN BEFORE USE

- Users must be trained before using the washer-dryer.

- The staff that use or repair this washer-dryer must have followed a complete training referring its use and maintenance. This training must include the selection and understanding of the washing cycle, the loading and unloading of the baskets and the handling of the washing products.

- The staff in contact with the detergent products and its emanations, which could be used in this washer-dryer, must have knowledge of the safety data sheet of the used products as well as the detailed instructions about the dangers and the detection of toxic product leaks.

- The training of the users and technicians must be done regularly and always before the first use of the washer-dryer. A written register of these trainings must be kept in order to prove the presence and the understanding of the interested parties.

SUMMARY

CHAPTER 1 INTRODUCTION 7

1. UP RANGE FOR LABORATORY 7

2. USER'S MANUAL 7

CHAPTER 2 BEFORE YOU START..... 9

1. PRESENTATION OF THE CONTROL PANEL 9

1.1 SINGLE DOOR CONTROL PANEL 9

1.2 DOUBLE DOOR CONTROL PANEL 9

2. OPENING OF THE DOOR(S) 10

2.1 SINGLE DOOR 10

2.2 DOUBLE DOOR 10

3. SAFETY ADVICES 11

3.1 PRECAUTIONS FOR USE 11

3.2 UTILIZATION 12

4. WHASHING PRODUCTS 13

4.2 PRODUCT TANK AREA 13

4.3 INSTRUCTIONS TO RESPECT IN CASE OF HANDLING THE WASHING PRODUCTS 14

4.4 INSTRUCTIONS TO RESPECT IN CASE OF CHANGING THE PRODUCT FORMULA 14

4.5 CHOICE OF NON-FOAMING DETERGENTS 14

4.6 CHANGE OF THE TANKS 15

5. PRINTER (OPTION) 17

5.1 PRINTER VERIFICATION 17

5.2 CHANGE OF THE PAPER ROLLER 18

5.3 CHANGE OF THE RIBBON CARTRIDGE 19

6. USING OF THE ACCESSORIES 20

6.1 CHOICE OF ACCESSORIES, BASKETS AND RACKS 20

6.2 ITEMS TO BE WASHED 20

7. UP – UPSS BASKETS RANGE 21

CHAPTER 3 UTILIZATION 22

1. LAUNCHING OF A CYCLE 22

1.1 SWITCHING ON 22

1.2 CYCLE 22

1.3 STARTING THE CYCLE 24

1.4 PERFORMANCE OF THE CYCLE 25

1.5 INFORMATION DURING THE CYCLE 25

2. END OF CYCLE 26

2.1 OPENING OF THE DOORS 26

2.2 REPRINTING OF THE TICKET (OPTION) 27

2.3 SWITCHING OFF 27

3. INFORMATIONS OUT OF CYCLE 28

3.1 STAND BY INFORMATIONS 28

3.2 READING OF THE NAMES OF THE PROGRAMS 29

3.3 READING CYCLE NAMES 30

4. MODIFYING THE PROGRAMMING 31

4.1 MODIFYING THE CYCLE 31

4.2 CYCLE NAME RECORDING PROCEDURE 36

5. WASHING PROGRAMS 37

5.1 TABLE OF FACTORY-PROGRAMMED CYCLES 910 UP 38

5.2 TABLE OF FACTORY-PROGRAMMED CYCLES 910 UPSS 39

5.3 TABLE OF FACTORY-PROGRAMMED CYCLES 1300 UP – UPDP – 910 UPDP 40

5.4 TABLE OF FACTORY-PROGRAMMED CYCLES 1300 UPSS–UPDPSS / 910 UPDPSS 41

5.5 TABLE OF FACTORY-PROGRAMMED CYCLES 1400 UP - UPDP 42

5.6 TABLE OF FACTORY-PROGRAMMED CYCLES 1400 UPSS - UPDPSS 43

5.7 TABLE OF FACTORY-PROGRAMMED CYCLES 1600 UP - UPDP 44

5.8 TABLE OF FACTORY-PROGRAMMED CYCLES 1600 UPSS - UPDPSS 45

5.9 USER CYCLE PROGRAMMING TABLE 46

CHAPTER 4 TRACEABILITY 47

1. PRINTER AND OUTPUT RS 232 (OPTION) 48

2. VALIDATION MONITOR, PRINTER AND OUTPUT (OPTION) 50

3. RECORDER (OPTION) 52

3.1 USE AND ADJUSTEMENT 52

3.2 PEN CHART RECORDER 52

4. VALITRACE (OPTION VTRACE MON or OPTION VTRACE MUL) 53

CHAPTER 5 MAINTENANCE OF THE WASHER..... 55

1. REGENERATING OF SOFTENER 55

2. FITTING THE 3 CHAMBER FILTERS AND SALT POT FILLING 56

3. STRAINERS FILTERS 57

3.1 DRYING AIR FILTERS 57

3.2 SHUT DOWN AT END OF DAY 57

4. EXTERNAL MAINTENANCE OF THE WASHER-DISINFECTOR 58

5. PREVENTIVE MAINTENANCE 59

CHAPTER 6 INCIDENTS 61

1. INCIDENTS 61

1.1 THE DETERGENT OR NEUTRALIZING AGENT DOES NOT ENTER THE WASHER 61

1.2 THE WASHER DOES NOT FUNCTION 61

1.3 ABNORMAL NOISE 61

2. LACK OF PRODUCTS 62

3. FAULT ALARMS 63

CHAPTER 7 PRODUCT HEALTH AND SAFETY DATA SHEET... 67

1. SAFETY DATA SHEET - DETERGENT "L.L.L." 68

2. SAFETY DATA SHEET - NEUTRALIZING AGENT "N.L.L." 70

3. PRODUCT HEALTH AND SAFETY DATA SHEET - LUBRICANT "V.L.L." 72

4. PRODUCT HEALTH AND SAFETY DATA SHEET – LANCERSHINE 74

CHAPTER 1 INTRODUCTION

1. UP RANGE FOR LABORATORY

This appliance is one of the most highly perfected on the market. It ensures a washing by mechanical, thermal and chemical (use of a detergent).

The UP range is a washer-dryer range conceived specially by LANCER in order to assure the washing and the drying of glassware , laboratory material of chemistry, bacteriology, virology, analysis…

2. USER'S MANUAL

The present manual is destined to facilitate the operations of use, handle, maintenance and repair.

This only concerns the operations to be done by an user.

Before using your washer-dryer and in order to obtain the best service read carefully the following advices and recommendations. Follow them, as they have been written in your interest.

Respecting the precautionary measures of use, the washer-dryer must only be used for the washing operations described in the manual.

All over this manual, we have incorporated brief comments and icons to help you locate the important information.

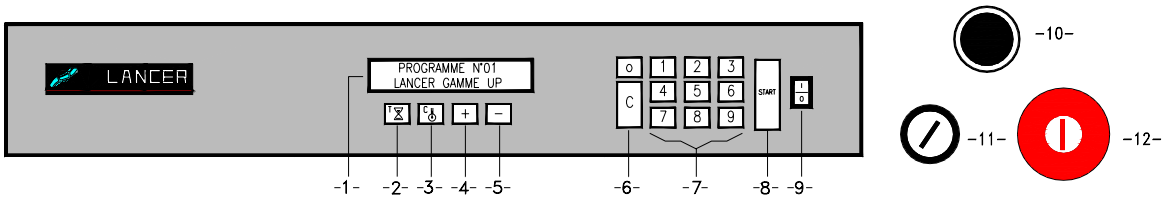
When you see this icon, it means:

: ATTENTION ! ! PAY SPECIAL ATTENTION ! !

CHAPTER 2 BEFORE YOU START

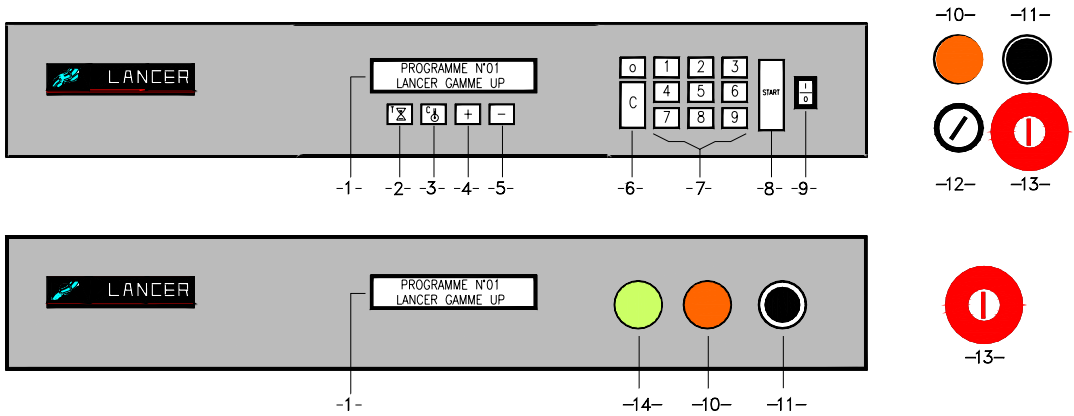
1. PRESENTATION OF THE CONTROL PANEL

1.1 SINGLE DOOR CONTROL PANEL



-1-	DISPLAY	**-8-**	KEY "**START**"
-2-	TIME KEY	**-9-**	KEY "**SWITCH ON / OFF**"
-3-	TEMPERATURE KEY	**-10-**	DOOR OPENING KEY (OPTION : ONLY ON WASHER WITH DOOR LOCKING - EXCEPT 1350 AND 1450 UPDIN-)
-4-	FUNCTION "+" KEY		
-5-	FUNCTION "-" KEY		
-6-	KEY "**C**"	**-11-**	KEY OVERRIDE (OPTION)
-7-	DIGITAL KEYPAD	**-12-**	EMERGENCY STOP (OPTION)

1.2 DOUBLE DOOR CONTROL PANEL



-1-	DISPLAY	**-8-**	KEY "**START**"
-2-	TIME KEY	**-9-**	KEY "**SWITCH ON / OFF**"
-3-	TEMPERATURE KEY	**-10-**	OPEN DOOR LIGHT
-4-	FUNCTION "+" KEY	**-11-**	DOOR OPENING KEY
-5-	FUNCTION "-" KEY	**-12-**	KEY OVERRIDE (OPTION)
-6-	KEY "**C**"	**-13-**	EMERGENCY STOP (OPTION)
-7-	DIGITAL KEYPAD	**-14-**	END OF CYCLE LIGHT

2. OPENING OF THE DOOR(S)

2.1 SINGLE DOOR

Pull the handle towards you and lower the door in the horizontal position.

For the equipped with door locking system, switch on power and push on the door button **-10-** (see page 9) and pull the handle towards you and lower the door in the horizontal position.

2.2 DOUBLE DOOR

This washer is equipped with a locking device that prevents opening the doors during the cycle.

When switching the on, it is possible to open the dirty side door.

Press the push-button **-11-** (see page 9) and pull the handle towards you and lower the door in the horizontal position. A red lamp lights on the other side of the washer. The 2nd door is locked.

When the washer is loaded and the door closed, washing cycle can begin.

At the end of the cycle, only door on the sterile side can be opened.

After having unloaded and closed the washer, the opposite door, on dirty side, can be manoeuvred for a further cycle.

3. SAFETY ADVICES

3.1 PRECAUTIONS FOR USE

BEFORE START, VERIFY THAT THE TAPS OF ENTRANCE OF WATER ARE OPENED.

EVERY MAINTENANCE AND TECHNICAL INSTALLATION INTERVENTION MUST BE DONE BY A TECHNICIAN ENTITLED TO WORK UNDER TENSION.

BURN RISK IF THE DOOR IS OPENED OVER 60°C .
AT THE END OF THE CYCLE, LET COOL THE SUPPORTS, BASKETS, ACCESORIES AND WASHED ITEMS BEFORE HANDLING THEM.

SAFETY INSTRUCTIONS LABEL ACCORDING THE STANDARDS :

- Only for UP range washers- dryers in conformity with the CE standard :

TEMP. > 60°C

(D) NICHT WÄHREND DEM SPÜLGANG ÖFFNEN
(F) NE PAS OUVRIR EN FONCTIONNEMENT
(GB) DO NOT OPEN WHEN FUNCTIONING
(NL) NIET OPENEN TIJDENS PROCES

- For UP range washers- dryers in conformity with the UL (for US) – cUL (for Canada) standards:

AVOID any accidental opening of the door during the cycle.

BURN RISK if the door is opened over 60°c.

At the end of cycle, allow the rack and washed items to cool before handling them.

Note

If the door is opened during operation, the washing cycle is stopped. The cycle is returned to its starting point. You should, therefore, repeat the cycle starting operations (see page 22).

Do not climb or sit on the doors.

Maximum charge allowed on the door is :

	WASHERS			
	910	1300	1400	1600
UP / UPSS	35 Kg	51 Kg	63 Kg	90 Kg
UP WITH PLINTH	43 Kg	X	X	X

3.2 UTILIZATION

It is strictly prohibited to use the washer in an explosive atmosphere or to use solvents, hydrocarbons, nitric acid, alcohols and derivatives, and any flammable products.

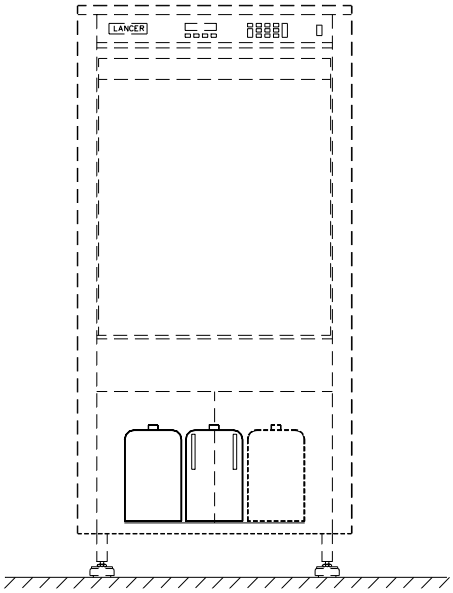
The use of following acids by ambient temperature is advised :
- acetic acid, (N.L.L.)
- phosphoric acid, (A.P.L.)

4. WHASHING PRODUCTS

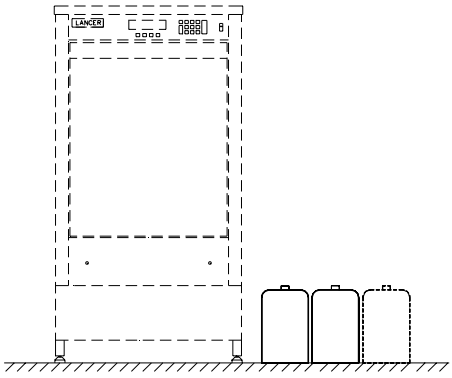
THE PROGRAMS PREESTABLISHED WITH THIS WASHER-DISINFECTOR HAVE BEEN VALIDATED WITH THE LANCER WASHING PRODUCTS.

4.2 PRODUCT TANK AREA

Some washers-disinfectors are equipped with a product tank casing located on front of washer (loading side for the double door washers)



For washers-disinfectors don't equipped with product tank casing, place containers near the washer at a maximum height of 150 mm above the floor level.



4.3 INSTRUCTIONS TO RESPECT IN CASE OF HANDLING THE WASHING PRODUCTS

ANYBODY CALLED TO HANDLE THE WASHING PRODUCTS MUST BE INFORMED OF THE IMPLICATED RISKS TO THESE PRODUCTS.

4.4 INSTRUCTIONS TO RESPECT IN CASE OF CHANGING THE PRODUCT FORMULA

When a product is changed by another one, it is imperative to rinse with water the circuit of the corresponding product before do the change.

Intake duration of the washing products in the programs must be modified in consequence.

4.5 CHOICE OF NON-FOAMING DETERGENTS

The choice of non-foaming detergents is decisive.

The contamination must be dissolved or dispersed in order to ensure satisfactory washing.

The right detergent should be used for the materials to be washed. Please do not hesitate to consult us for advice.

4.6 CHANGE OF THE TANKS

Before launching the cycle

Before launching the cycle, check product tank levels and change those with low levels so as to avoid bad washing or bad disinfection because of a lack of additive.

At beginning of cycle *(only for washers with levels floats)*

When starting the cycle, in case of lack of product, a message of sound and visual alarm appears.

Example :

A L A R M
D E T E R G E N T R E C H .

Switch the washer-disinfector OFF by pushing the key .

Use the necessary protections when handling the products (gloves, masks, glasses…) according to point 7 of the safety data sheet corresponding to the washing product.

Open the tank casing door and locate the tank to be changed.
Consider verify the level of the other product tanks to avoid a new alarm « LACK OF PRODUCT » in the next beginning of cycle.
Unscrew the stoppers and take off the product suction pipes, place them in a container.
Change the tank(s) and replace the suction pipe(s).
Switch the washer-disinfector ON by pushing the key .

During the cycle *(only for washers with validation monitor)*

During the cycle, in case of lack of product, a message of sound and visual alarm appears.

Example :

E X T . I N T E R R U P .
W A S H

This mistake is also mentioned in the ticket.

Example :

PB IN THE DETERGENT INTAKE
INCIDENT N°10

Switch the washer-disinfector OFF by pushing the key .

Please ask your maintenance service to leave this alarm.

5. PRINTER (OPTION)

5.1 PRINTER VERIFICATION

Before launching a cycle or printing again the ticket, check the quantity of paper in the roller of the printer

If a continual red trace appears, replace it by a new one (see *page 18*).

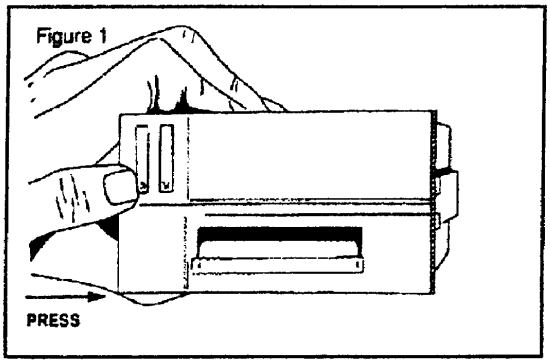
If the quality of the ink during the precedent impression of the ticket was not enough for a good reading, consider changing the ribbon of the printer (see *page 19*).

5.2 CHANGE OF THE PAPER ROLLER

There are two buttons on the front panel of the printer. One button operates the front door latch, the other controls the paper feed.

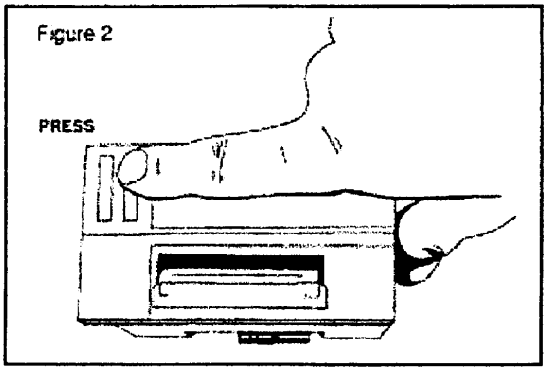
Door Latch:

With the printer mounted in data mode attitude (paper emerging downwards) so that the two control buttons are at upper left, to open the front door of the printer, press the door latch (the outermost of the two buttons) sideways towards the other button, using thumb or forefinger (see Figure 1). This will release the latch and the door can be swung outwards to expose the paper roll.



Paper Feed Button.

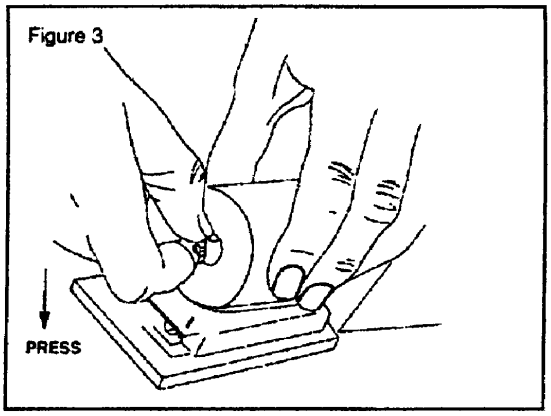
With the printer in data mode attitude press the top part of the innermost button to activate paper feed (see Figure 2). This will continue for as long as the button is held down.



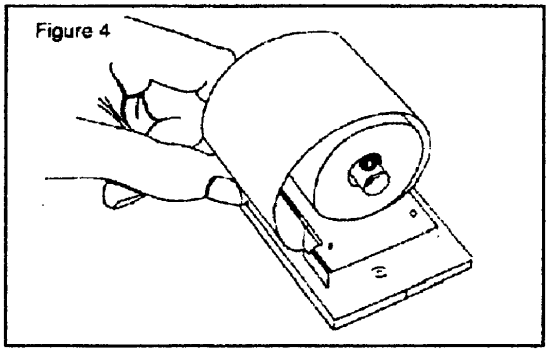
Paper Roll Replacement:

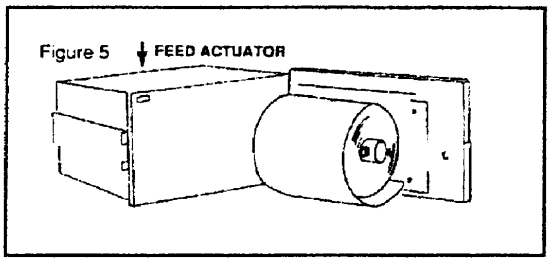
Open the printer door as described above and swing the door open to expose the paper roll. If any paper remains in the printer, tear the end off against the paper tear bar and carefully pull the remaining paper backwards, from the rear of the mechanism mounting chassis, until the free end emerges. Press the paper roll retaining button inwards using the thumb and forefinger (see figure 3) and remove the empty roll.

Take a new roll of paper, and separate the end from the rest of the roll. Remove any damaged or gummed part of the paper, and cut the free end squarely with a pair of scissors or a knife, leaving a clean straight edge to present to the printer mechanism.



Thread the new roll past the retention button onto the spindle with the paper unspooling in an anticlockwise direction when viewed from the open end. (See Figure 4). Press the paper feed actuator arm (at upper left in data mode) until the mechanism grips the paper and pulls it through to the front of the printer. (See Figure 5).





Turn the paper roll so that any loose turns are wound snugly against the roll. Close the printer door.

More paper may now be fed through by pressing the paper feed button on the front panel. (see Figure 2).

5.3 CHANGE OF THE RIBBON CARTRIDGE

Ribbon Cartridge Replacement:
Tear off any paper emerging from the printer.
Open the printer door by pressing the door latch inwards.
Place forefinger against the lower edge of the mechanism mounting chassis and thumb against the base of the door (see Figure 6).

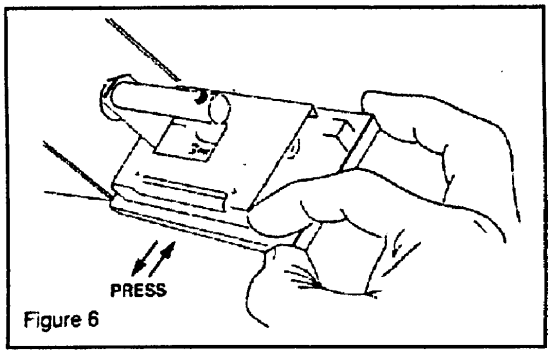


Figure 6

Carefully press the door and chassis in vertically opposite directions until the catch is released. Do not pull the door and chassis apart without first releasing the catch.
Swing the chassis back, leaving the door fully open. This will expose the printer mechanism and ink ribbon cartridge.
Press down on the end of the ink ribbon cartridge marked 'PUSH' (see Figure 7) and carefully remove the used cartridge.

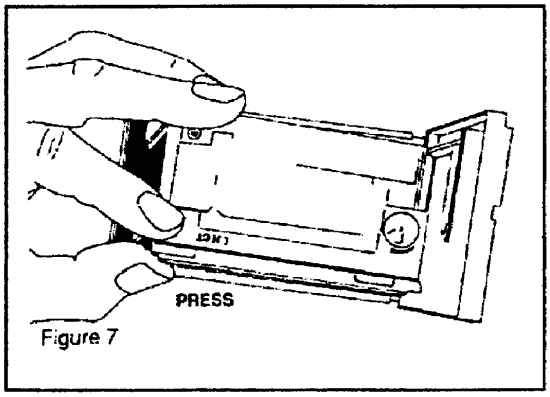


Figure 7

Fit a replacement cartridge, ensuring that the paper lies between the ribbon and the steel printer platen.

Check that the ribbon cartridge spindle is correctly seated over the printer ribbon drive shaft, and snap the cartridge into place.
Ensure that the ribbon is taut and parallel to the paper.
If necessary tighten the ribbon by turning the faceted disc clockwise using fingernail (see Figure 8).

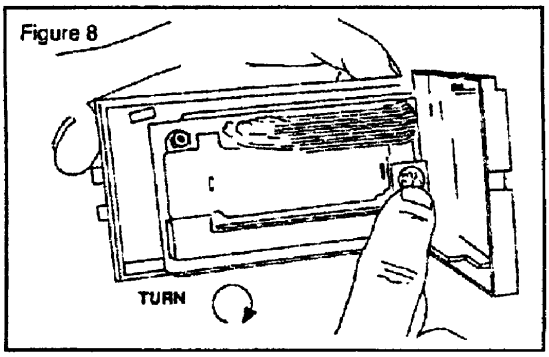


Figure 8

If there is some paper protruding from the front of the printer mechanism, ensure that it will pass clearly through the guide channel and past the tear bar before snapping the chassis shut against the back of the door.
Turn the paper roll by hand so that any loose turns are wound snugly against the roll.
Close the door and check that the paper flows freely, using the paper feed button.

Consumables available
A consumables pack (Stock No. A160CBP) is available containing five 19m rolls of paper and two Epson ribbon cartridges. Use of this paper is recommended, as most paper rolls from other sources are too large to fit within the printer housing, and may be of inferior quality causing dust and wear.

6. USING OF THE ACCESSORIES

6.1 CHOICE OF ACCESSORIES, BASKETS AND RACKS

THE CHOICE OF ACCESSORIES, BASKETS AND RACKS IS VITAL.

In the case of flasks washing, it is very important that the flow rate of the injectors used must be lower than the flow capacity of the flasks to be washed in order to avoid gradual filling of the flasks during the washing cycle. A narrow neck hindering the fast draining of water gives mediocre results. The mechanical action of the jet is absorbed by the water contained in the glassware. It is indispensable to use baskets with injectors of suitable diameter and, above all, to secure lightweight items with a cover grille (GC) or an injector cover grille (GCI).

6.2 ITEMS TO BE WASHED

Place the items correctly on or in the baskets or racks so that they do not strike one against the other during the washing cycle. Check that they are correctly positioned, secure them with a cover grille (GC) or an injector cover grille (GCI).

You should only use baskets that are suitable for the parts to be washed. When your washer is put into service, our technicians will give you useful advice on the best way to load it.

Close the door, and the washing cycle can begin.

When several baskets are used simultaneously, maximum one baskets can be in position out of chamber on the door and the runners.
Maximum charge allowed on the intermediate runners is 26 Kg except 1600 range where the charge is 35 Kg.

IF THE LOADINGS TO BE HANDLED ARE SUPERIOR TO 25 KG THERE IS PLACE TO USE A HANDLING SYSTEM.

7. UP – UPSS BASKETS RANGE

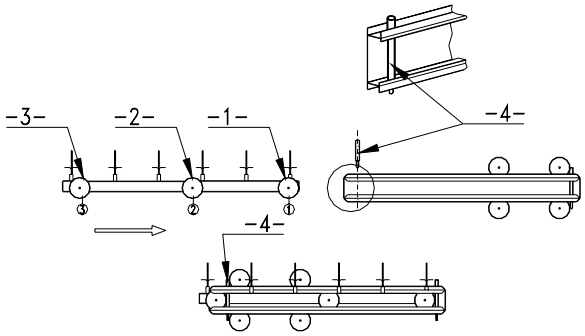
FITTING THE BASKETS

a) Pull the slide rails out of the chamber.

b) Remove the front pins.

c) Insert wheels 1 and 2 of the basket in the slide rails.

d) Fit the pins back in place between wheels 2 and 3.

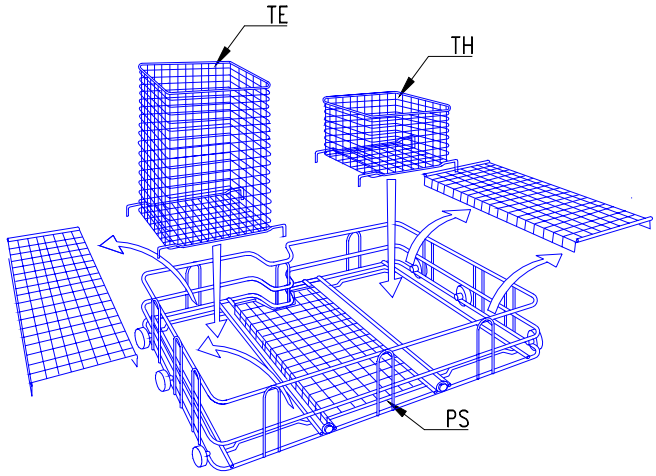


1-2-3 ROULETTES DE PANIER
4 GOUPILLE

FITTING BASKETS OF TYPE TE OR TH ON A BASKET OF TYPE PS OR PSB

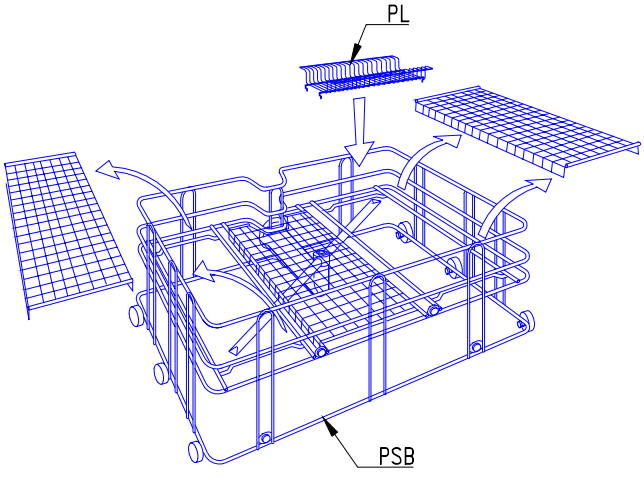
In order to wash items in baskets of type "TE" (for test tubes) or "TH" (for haemolysis tubes), place the baskets on the basket of type "PS" (single basket) or "PSB" (single basket with arm) after removing one or more "support grilles". Check that the catches are correctly fitted on the rods designed for that purpose. Reinstall the grilles for any washing operation that does not require the use of "TE" or "TH" type baskets.

Note : The single basket (PS) can be positioned only at the bottom level of the washer chamber where washing action is provided by the arm located at the bottom at the chamber. The single basket equipped with its own washing arm (PSB) is positioned at higher levels.



FITTING BASKETS OF TYPE PL ON A BASKET OF TYPE PS OR PSB

In order to wash items in baskets of type "PL" (blade type baskets), these baskets should be fitted on the single basket (PS) or single basket with arm (PSB) after removing one or more "support grilles". Check that the catches are correctly fitted on the rods designed for that purpose. Reinstall the grilles for any washing operation that does not require the use of "PL" type baskets.



CHAPTER 3 UTILIZATION

1. LAUNCHING OF A CYCLE

1.1 SWITCHING ON

Push the key .
The display indicates the number of the last executed program and the type of washer-disinfector.

P R O G R A M M E N ° 0 4
L A N C E R *U P R A N G E*

1.2 CYCLE

The washer-disinfector is delivered with 4 pre-established programs at the factory (see page 44). Enter the number of the program to select the cycle, with the help of the keys of the numeric keypad.

PROGRAMME 01 : VOLUMETRIC FLASKS

- Prewash with hot softened water
- Wash with hot softened water (50°C) with the detergent.
- Rinse with running water
- Acid rinse with the neutralizant acid.
- Rinse with running water
- Last rinse with cold demineralised water
- Disinfection at 50° with the demineralized or osmosis-treated water.
- Drying

PROGRAMME 02 : BACTERIOLOGY, VIROLOGY

- Prewash with hot softened water
- Wash with hot softened water (85°C) with the detergent.
- Rinse with running water
- Acid rinse with the neutralizant acid.
- 2 Rinses with running water
- Disinfection at 80° with the demineralized or osmosis-treated water.
- Drying

PROGRAMME 03 : CHEMISTRY, BIOLOGY

- Prewash with hot softened water
- Wash with hot softened water (70°C) with the detergent.
- 2 Rinses with running water
- Acid rinse with the neutralizant acid.
- Rinse with running water
- Last rinse with cold demineralised water
- Disinfection at 80° with the demineralized or osmosis-treated water.
- Drying

PROGRAMME 04 : GELOSE

- Prewash with with hot softened water (90°C)
- A second prewash with hot softened water
- Wash with hot softened water (90°C) with the detergent
- 2 Rinses with running water
- Acid rinse with the neutralizant acid.
- Rinse with running water
- Rinse with running water
- Disinfection at 80° with the demineralized or osmosis-treated water.
- Drying

NOTE: other programs can be pre-established depending on their necessities (maximum 36).

1.3 STARTING THE CYCLE

Choose an appropriate cycle for the items to be washed.
Press the START push-button. There are 3 possibilities.

a) The display indicates :
- the selected cycle number,
- the temperature in the chamber,
- the current function, "RESINS RINSE*" or "PREWASH 1"

The cycle will be carried out without requiring any further action.

* *Only on washers with regeneration.*

b) The display indicates :

If there is a lack of product, salt *(for washer with regeneration)* or washing products *(for washer with level floats)*, the message is displayed at the start of the cycle when you press the START key.

It is essential to fill the salt pot located inside of the washer, (*see page 56*) and or to fill the tanks of products.

c) The display indicates :

In the case the chamber contains water at the beginning of the cycle, either following the interruption of the previous cycle or due to an abnormal addition of water from outside).

The washer is emptied and the cycle then proceeds normally.

1.4 PERFORMANCE OF THE CYCLE

During the cycle, the display unit constantly shows :
- the number of the current programmed cycle,
- the temperature of the water or the air in the chamber,
- the name of the current function.

1.5 INFORMATION DURING THE CYCLE

During a cycle, it is possible in any moment to know the duration of a sequence in course by pushing the key time [T].

In the same way, an action on the key [C] gives the heating or drying programmed temperature.

If there is no heating in this sequence (ex : acid rinsing) or if the heating is programmed at 00°C, the answer will be "NO HEATING"

Besides, a simultaneous action on the keys.
- [T] and [C] will give the name of the phase in course,
- [T] and [+] will give the duration of this phase,
- [T] and [—] will give the estimated remaining duration of the program in course.

Note :
The estimated remaining time can only be read if the same cycle has already been fully carried out.

Examples :

KEYS	DISPLAY
[T]	Duration = 01 mn
[C]	Temperature = 40° C
[T] and [C]	Detergent
[T] and [+]	Duration = 0 mn 18 s
[T] and [—]	Estimated remaining duration = 48 mn

Special cases:
- For RUNNING WATER RINSE 1, RUNNING WATER RINSE 2, the duration of the phase is replaced by a number from 1 to 9.
- Throughout the filling phase, the display unit indicates "WAIT FOR LEVEL".

2. END OF CYCLE

2.1 OPENING OF THE DOORS

BURN RISK IF THE DOOR IS OPENED OVER 60°C.
AT THE END OF THE CYCLE, LET COOL THE SUPPORTS, BASKETS, ACCESORIES AND WASHED OBJECTS BEFORE HANDLING THEM.

The display unit indicates "end of cycle".

E N D O F
C Y C L E

Remove and control the ticket delivred by the printer (*option*).

WASHER-DISINFECTOR SINGLE DROP DOWN DOOR

Push the key START.
Open the door, the display recovers its initial state.

WASHER-DISINFECTOR DOUBLE DROP DOWN DOOR

O P E N I N G W A I T I N G
D O O R U N L O A D I N G

Open the unloading side door and the following message appears.

C L O S I N G W A I T I N G
D O O R U N L O A D I N G

Once the unloading has ended, close the unloading side door.
The display shows :

O P E N I N G W A I T I N G
D O O R L O A D I N G

Open the loading side door and the display recovers its initial state.

2.2 REPRINTING OF THE TICKET (OPTION)

It is possible to print the ticket again in the following cases :
- lack of paper (end of roller)
- bad impression.

Press the key .
Wait for the complete impression of the ticket before launching a new washing cycle.

2.3 SWITCHING OFF

Push the key ,
Close the taps of arrival of water.
Clean the filters of the bottom of the chamber (see *page56*).

Comment :

In case of an interruption of the electrical feeding, the program is returned to the initial point. It is convenient then to proceed again to the operations of BEGINNING OF A CYCLE. It is convenient to execute again the complete washing cycle.

3. INFORMATIONS OUT OF CYCLE

3.1 STAND BY INFORMATIONS

Stand by machine, it is possible [⏳].

An action on the key [—] gives the name of the program.

Besides, a simultaneous action on the program.
- [+] and [—] will give the OPTION OF THE PROGRAM by its NAME
- [⏳] and [+] will give the TIME MACHINE and the NUMBERS OF CYCLES already done

Example :

KEYS	DISPLAY
[⏳]	Duration = 30 mn
[—]	Cycle name
[+] and [—]	PROGRAM N° 02 / INSTRUMENTS
[⏳] and [+]	TOTAL = 4 H / CYCLES = 5

3.2 READING OF THE NAMES OF THE PROGRAMS

Switch the washer-disinfector ON by pushing the key
The display shows the number of the last executed program.

P R O G R A M M E N ° 0 1
L A N C E R *U P* *R A N G E*

Select the wanted program (example : program N°2)

P R O G R A M M E N ° 0 2
L A N C E R *U P* *R A N G E*

The name of the program appears by an action on the key [—].

P R O G R A M M E N ° 0 2
I N S T R U M E N T S

A simultaneous action on the keys [—] and [+] enables to watch the names of the following programs.

P R O G R A M M E N ° 0 3
T E S T T U B E S

When you stop pushing on the key [—], the last marked program is selected.

3.3 READING CYCLE NAMES

Switch the washer-disinfector ON by pushing the key

The display shows the number of the last executed program.
Select program 00.

P R O G R A M M E N ° 0 0
L A N C E R *U P R A N G E*

Validate with START key.

V A L I D A T I O N

Validate with START key a second time.

P R O G R A M M E N °
0 1

Select the cycle.
Validate with START key.
The sequencing of all the functions in the cycle can be displayed by repetedly pressing on the START key.
At the end of the cycle, the display unit returns to its initial rate.

4. MODIFYING THE PROGRAMMING

4.1 MODIFYING THE CYCLE

It enables to read, personalize and create the washing programs.

NEVER MODIFY THE FACTORY PROGRAMS.
TO RECORD NEW PROGRAMS USE THE 36 FREE PROGRAMS.

Power up the washer-disinfector by pushing key [I/O].
The display shows then the number of the last used program.
Select the program N°00 with the help of the numerical keyboard.

P R O G R A M M E n ° 0 0
L A N C E R *U P R A N G E*

Validate with key [START].

V A L I D A T I O N

Formulate access code **-308-**.
If an erroneous code is typed, an error message is displayed, until correct code is displayed.

P R O G R A M M E N °
0 1

Select the cycle to be modified with [+] and [—] or numeric keypad.
Validate with the [START] key.

P E R I O D = 0 2 m 0 0 s
P R E W A S H 1

Choose the time for prewash 1 (1 to 30 min) .
(The function is cancelled if a time of « 0 » is set).
Select the minutes. Validate with the START key.
Select the seconds. Validate with the START key.

C O L D W A T E R
P R E W A S H 1

Filling water (cold or hot) is selected with key C.
Validate with the START key.

T E M P . = 7 5 ° C
P R E W A S H 1

Choose the temperature of prewash 1 (0 to 95° C) .
Validate with the START key.

D E T E R G E N T 0 0 m 0 0 s
P R E W A S H 1

Choose the detergent intake time (0 to 360 s) .
Each time the + and − keys is pressed the time is increased or decreased by a step of 1 second, making approximately 5 ml.
Select the minutes. Validate with the START key.
Select the seconds. Validate with the START key.

D E T E R G . 2 0 0 m 0 0 s
P R E W A S H 1

Only used for washer with additional dosing pump.
Not used. Must be equal to zero.
Validate with the **"START"** key.

Note :
Set the PREWASH 2, PREWASH 3 and WASH functions in the same way.

```
0 1   N U M B E R   =   1
R U N N I N G   W A T E R   1
```

Select the number of running water rinses 1 (0 to 9.
Validate with the START key.

```
  P E R I O D   =   0 2 m 0 0 s
      A C I D   R I N S E
```

Select the duration of rinsing with neutralizing acid (1 to 30 min) .
Select the minutes. Validate with the START key.
Select the seconds. Validate with the START key.

```
    A C I D   =   0 0 m 2 1 s
      A C I D   R I N S E
```

Select the duration of acid intake (1 to 30 min) .
Select the minutes. Validate with the START key.
Select the seconds. Validate with the START key.

```
0 1   N U M B E R   =   1
R U N N I N G   W A T E R   2
```

Select the number of running water rinses 2 (0 to 9) .
Validate with the START key.

```
  P E R I O D   =   0 1 m 0 0 s
    C O L D   D E M I .   1
```

Select the duration of cold demi.(*) rinse 1 (1 to 30 min) .
Select the minutes. Validate with the START key.
Select the seconds. Validate with the START key.

Note :
Set the COLD DEMI. RINSE 2, COLD DEMI. RINSE 3 and COLD DEMI. RINSE 4 in the same way.

```
P E R I O D  =  0 3 m 1 0 s
H O T  D E M I
```

Select the duration of the hot demi.(*) rinse (1 to 30 min) .
Select the minutes. Validate with the START key.
Select the seconds. Validate with the START key.

```
C O L D  W A T E R
H O T  D E M I .
```

This display only appears if REGENERATION 2 duration (code 988) is different from 0.
Filling demi.* water rinse (cold or hot) is selected with key C.
Validate with the START key.

```
T E M P .  =  8 5 ° C
H O T  D E M I .
```

Select the temperature of the hot demi. (*) rinse (0 to 95°C).
Validate with the START key.

(*) Demi. = demineralized, distilled or osmosis-treated water.

```
P E R I O D  =  2 0 m 0 0 s
D R Y I N G
```

Select the drying time (0 to 90 min) .
Set on 0 if your washer is equipped with a "super drying" device.
Select the minutes. Validate with the START key.
Select the seconds. Validate with the START key.

T E M P . = 9 0 ° C
D R Y I N G

It only appears if your washer is equipped with a drying regulation device (option), choose drying temperature (0 to 99°C) using numeric keypad or keys [+] et [—].
Validate with the [START] key.

P E R I O D = 0 0 m 0 0 s
S U P E R D R Y I N G

For the washers with super drying:
Select the super drying time (0 to 90 min) .
Select the minutes. Validate with the [START] key.
Select the seconds. Validate with the [START] key.

T E M P . = 8 5 ° C
S U P E R D R Y I N G

It only appears if your washer is equipped with a drying regulation device (option), choose drying temperature (0 to 99°C) using numeric keypad or keys [+] et [—].
Validate with the [START] key.

The display unit returns to its initial state.

P R O G R A M M E n ° 0 1
L A N C E R *U P R A N G E*

4.2 CYCLE NAME RECORDING PROCEDURE

In addition to being identified by its number (01, 02, 03, etc.), each programmed cycle can be given a "NAME" (examples : CHEMISTRY, BACTERIO, INSTRUMENTS, ANAESTHETIC). A maximum of 16 characters are available. This name can be stored in memory by the operator, using an access code.

Switch on the appliance by pressing switch [I/O] .
The display unit then indicates the number of the last cycle used.
Select program 00.
Validate with the [START] key.

V A L I D A T I O N

Enter the access the code -000- on the numeric keypad -7-.
If the code entered is wrong, an error message is displayed.

V A L I D A T I O N
I N C O R R E C T

Try again. If the right code is entered :

P R O G R A M M E N A M E
0 1

Select the program.
Validate with the [START] key.

P R O G R A M M E N A M E
A

The letter A appears at the bottom of the display unit.
Characters are selected with the [+] and [—] keys.
Each character must be validated with the [START] key.
Spaces are obtained with key [C].
When the name of the cycle has been displayed, complete the line of characters with spaces (using key [C]).
The display unit returns to its initial state.

5. WASHING PROGRAMS

5.1 TABLE OF FACTORY-PROGRAMMED CYCLES 910 UP

Water consumption estimated per operation (according to the baskets used): 14 litres.
Output from acid and detergent pumps (according to the products used): 280 ml/min.

		Volumetric flasks	Bacteriology Virology	Chemistry Biology	Agarose Gel
FUNCTIONS	POSSIBILITY	CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH TIME	0 TO 30 mn	1	2	2	2
FILLING	HOT/COLD	H	H	H	H
PREWASH 1 TEMPERATURE	0 TO 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 TO 360 s	6	6	6	24
Option : PREWASH 1 DETERGENT 2	0 TO 360 s	0	0	0	0
PREWASH 2 TIME	0 TO 30 mn	0	0	0	1
FILLING	HOT/COLD	/	/	/	H
PREWASH 2 TEMPERATURE	0 TO 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 TO 360 s	/	/	/	0
Option : PREWASH 2 DETERGENT 2	0 TO 360 s	/	/	/	0
PREWASH 3 TIME	0 TO 30 mn	0	0	0	0
FILLING	HOT/COLD	/	/	/	/
PREWASH 3 TEMPERATURE	0 TO 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 TO 360 s	/	/	/	/
Option : PREWASH 3 DETERGENT 2	0 TO 360 s	/	/	/	/
WASH TIME	0 TO 30 mn	4	4	2	2
FILLING	HOT/COLD	H	H	H	H
WASH TEMPERATURE	0 TO 95 °C	50	85	70	90
WASH DETERGENT	0 TO 360 s	24	24	24	30
Option : WASH DETERGENT 2	0 TO 360 s	0	0	0	0
RUNNING WATER RINSE 1	0 TO 9	1	1	2	2
ACID RINSE TIME	0 TO 30 mn	2	2	2	2
NEUTRALISING ACID	0 TO 360 s	24	24	24	24
RUNNING WATER RINSE 2	0 TO 9	1	2	1	1
COLD DEMI. TIME 1	0 TO 30 mn	1	0	1	1
COLD DEMI. TIME 2	0 TO 30 mn	0	0	1	0
COLD DEMI. TIME 3	0 TO 30 mn	0	0	0	0
COLD DEMI. TIME 4	0 TO 30 mn	0	0	0	0
HOT DEMI. TIME	0 TO 30 mn	1	1	1	1
HOT DEMI. TEMPERATURE	0 TO 95 °C	50	80	80	80
HOT DEMI. LUBRICANT	0 TO 360 s	0	0	0	0
DRYING	0 TO 30 mn	10	25	25	25
DRYING TEMPERATURE *	0 TO 95 °C	60	60	60	90

*	IF DRYING TEMPERATURE ADJUSTEMENT OPTION

5.2 TABLE OF FACTORY-PROGRAMMED CYCLES 910 UPSS

Water consumption estimated per operation (according to the baskets used): 17 litres.
Output from acid and detergent pumps (according to the products used): 280 ml/min.

		Volumetric flasks	Bacteriology Virology	Chemistry Biology	Agarose Gel
FUNCTIONS	POSSIBILITY	CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH TIME	0 TO 30 mn	1	2	2	2
FILLING	HOT/COLD	H	H	H	H
PREWASH 1 TEMPERATURE	0 TO 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 TO 360 s	7	7	7	29
Option : PREWASH 1 DETERGENT 2	0 TO 360 s	0	0	0	0
PREWASH 2 TIME	0 TO 30 mn	0	0	0	1
FILLING	HOT/COLD	/	/	/	H
PREWASH 2 TEMPERATURE	0 TO 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 TO 360 s	/	/	/	0
Option : PREWASH 2 DETERGENT 2	0 TO 360 s	/	/	/	0
PREWASH 3 TIME	0 TO 30 mn	0	0	0	0
FILLING	HOT/COLD	/	/	/	/
PREWASH 3 TEMPERATURE	0 TO 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 TO 360 s	/	/	/	/
Option : PREWASH 3 DETERGENT 2	0 TO 360 s	/	/	/	/
WASH TIME	0 TO 30 mn	4	4	2	2
FILLING	HOT/COLD	H	H	H	H
WASH TEMPERATURE	0 TO 95 °C	50	85	70	90
WASH DETERGENT	0 TO 360 s	29	29	29	36
Option : WASH DETERGENT 2	0 TO 360 s	0	0	0	0
RUNNING WATER RINSE 1	0 TO 9	1	1	2	2
ACID RINSE TIME	0 TO 30 mn	2	2	2	2
NEUTRALISING ACID	0 TO 360 s	29	29	29	29
RUNNING WATER RINSE 2	0 TO 9	1	2	1	1
COLD DEMI. TIME 1	0 TO 30 mn	1	0	1	1
COLD DEMI. TIME 2	0 TO 30 mn	0	0	1	0
COLD DEMI. TIME 3	0 TO 30 mn	0	0	0	0
COLD DEMI. TIME 4	0 TO 30 mn	0	0	0	0
HOT DEMI. TIME	0 TO 30 mn	1	1	1	1
HOT DEMI. TEMPERATURE	0 TO 95 °C	50	80	80	80
HOT DEMI. LUBRICANT	0 TO 360 s	0	0	0	0
DRYING	0 TO 30 mn	0	0	0	0
SUPER DRYING	0 TO 30 mn	10	15	15	15
DRYING TEMPERATURE *	0 TO 95 °C	60	60	60	90

* IF DRYING TEMPERATURE ADJUSTEMENT OPTION

5.3 TABLE OF FACTORY-PROGRAMMED CYCLES 1300 UP – UPDP – 910 UPDP

Water consumption estimated per operation (according to the baskets used): 17 litres.
Output from acid and detergent pumps (according to the products used): 280 ml/min.

		Volumetric flasks	Bacteriology Virology	Chemistry Biology	Agarose Gel
FUNCTIONS	POSSIBILITY	CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH TIME	0 TO 30 mn	1	2	2	2
FILLING	HOT/COLD	H	H	H	H
PREWASH 1 TEMPERATURE	0 TO 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 TO 360 s	7	7	7	29
Option : PREWASH 1 DETERGENT 2	0 TO 360 s	0	0	0	0
PREWASH 2 TIME	0 TO 30 mn	0	0	0	1
FILLING	HOT/COLD	/	/	/	H
PREWASH 2 TEMPERATURE	0 TO 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 TO 360 s	/	/	/	0
Option : PREWASH 2 DETERGENT 2	0 TO 360 s	/	/	/	0
PREWASH 3 TIME	0 TO 30 mn	0	0	0	0
FILLING	HOT/COLD	/	/	/	/
PREWASH 3 TEMPERATURE	0 TO 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 TO 360 s	/	/	/	/
Option : PREWASH 3 DETERGENT 2	0 TO 360 s	/	/	/	/
WASH TIME	0 TO 30 mn	4	4	2	2
FILLING	HOT/COLD	H	H	H	H
WASH TEMPERATURE	0 TO 95 °C	50	85	70	90
WASH DETERGENT	0 TO 360 s	29	29	29	36
Option : WASH DETERGENT 2	0 TO 360 s	0	0	0	0
RUNNING WATER RINSE 1	0 TO 9	1	1	2	2
ACID RINSE TIME	0 TO 30 mn	2	2	2	2
NEUTRALISING ACID	0 TO 360 s	29	29	29	29
RUNNING WATER RINSE 2	0 TO 9	1	2	1	1
COLD DEMI. TIME 1	0 TO 30 mn	1	0	1	1
COLD DEMI. TIME 2	0 TO 30 mn	0	0	1	0
COLD DEMI. TIME 3	0 TO 30 mn	0	0	0	0
COLD DEMI. TIME 4	0 TO 30 mn	0	0	0	0
HOT DEMI. TIME	0 TO 30 mn	1	1	1	1
HOT DEMI. TEMPERATURE	0 TO 95 °C	50	80	80	80
HOT DEMI. LUBRICANT	0 TO 360 s	0	0	0	0
DRYING	0 TO 30 mn	10	25	25	25
DRYING TEMPERATURE *	0 TO 95 °C	60	60	60	90

*	IF DRYING TEMPERATURE ADJUSTEMENT OPTION

5.4 TABLE OF FACTORY-PROGRAMMED CYCLES 1300 UPSS–UPDPSS / 910 UPDPSS

Water consumption estimated per operation (according to the baskets used): 17 litres.
Output from acid and detergent pumps (according to the products used): 280 ml/min.

		Volumetric flasks	Bacteriology Virology	Chemistry Biology	Agarose Gel
FUNCTIONS	POSSIBILITY	CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH TIME	0 TO 30 mn	1	2	2	2
FILLING	HOT/COLD	H	H	H	H
PREWASH 1 TEMPERATURE	0 TO 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 TO 360 s	7	7	7	29
Option : PREWASH 1 DETERGENT 2	0 TO 360 s	0	0	0	0
PREWASH 2 TIME	0 TO 30 mn	0	0	0	1
FILLING	HOT/COLD	/	/	/	H
PREWASH 2 TEMPERATURE	0 TO 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 TO 360 s	/	/	/	0
Option : PREWASH 2 DETERGENT 2	0 TO 360 s	/	/	/	0
PREWASH 3 TIME	0 TO 30 mn	0	0	0	0
FILLING	HOT/COLD	/	/	/	/
PREWASH 3 TEMPERATURE	0 TO 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 TO 360 s	/	/	/	/
Option : PREWASH 3 DETERGENT 2	0 TO 360 s	/	/	/	/
WASH TIME	0 TO 30 mn	4	4	2	2
FILLING	HOT/COLD	H	H	H	H
WASH TEMPERATURE	0 TO 95 °C	50	85	70	90
WASH DETERGENT	0 TO 360 s	29	29	29	36
Option : WASH DETERGENT 2	0 TO 360 s	0	0	0	0
RUNNING WATER RINSE 1	0 TO 9	1	1	2	2
ACID RINSE TIME	0 TO 30 mn	2	2	2	2
NEUTRALISING ACID	0 TO 360 s	29	29	29	29
RUNNING WATER RINSE 2	0 TO 9	1	2	1	1
COLD DEMI. TIME 1	0 TO 30 mn	1	0	1	1
COLD DEMI. TIME 2	0 TO 30 mn	0	0	1	0
COLD DEMI. TIME 3	0 TO 30 mn	0	0	0	0
COLD DEMI. TIME 4	0 TO 30 mn	0	0	0	0
HOT DEMI. TIME	0 TO 30 mn	1	1	1	1
HOT DEMI. TEMPERATURE	0 TO 95 °C	50	80	80	80
HOT DEMI. LUBRICANT	0 TO 360 s	0	0	0	0
DRYING	0 TO 30 mn	0	0	0	0
SUPER DRYING	0 TO 30 mn	10	15	15	15
DRYING TEMPERATURE *	0 TO 95 °C	60	60	60	90

* IF DRYING TEMPERATURE ADJUSTEMENT OPTION

5.5 TABLE OF FACTORY-PROGRAMMED CYCLES 1400 UP - UPDP

Water consumption estimated per operation (according to the baskets used): 25 litres.
Output from acid and detergent pumps (according to the products used): 280 ml/min.

		Volumetric flasks	Bacteriology Virology	Chemistry Biology	Agarose Gel
FUNCTIONS	POSSIBILITY	CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH TIME	0 TO 30 mn	1	2	2	2
FILLING	HOT/COLD	H	H	H	H
PREWASH 1 TEMPERATURE	0 TO 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 TO 360 s	11	11	11	43
Option : PREWASH 1 DETERGENT 2	0 TO 360 s	0	0	0	0
PREWASH 2 TIME	0 TO 30 mn	0	0	0	1
FILLING	HOT/COLD	/	/	/	H
PREWASH 2 TEMPERATURE	0 TO 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 TO 360 s	/	/	/	0
Option : PREWASH 2 DETERGENT 2	0 TO 360 s	/	/	/	0
PREWASH 3 TIME	0 TO 30 mn	0	0	0	0
FILLING	HOT/COLD	/	/	/	/
PREWASH 3 TEMPERATURE	0 TO 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 TO 360 s	/	/	/	/
Option : PREWASH 3 DETERGENT 2	0 TO 360 s	/	/	/	/
WASH TIME	0 TO 30 mn	4	4	2	2
FILLING	HOT/COLD	H	H	H	H
WASH TEMPERATURE	0 TO 95 °C	50	85	70	90
WASH DETERGENT	0 TO 360 s	43	43	43	54
Option : WASH DETERGENT 2	0 TO 360 s	0	0	0	0
RUNNING WATER RINSE 1	0 TO 9	1	1	2	2
ACID RINSE TIME	0 TO 30 mn	2	2	2	2
NEUTRALISING ACID	0 TO 360 s	43	43	43	43
RUNNING WATER RINSE 2	0 TO 9	1	2	1	1
COLD DEMI. TIME 1	0 TO 30 mn	1	0	1	1
COLD DEMI. TIME 2	0 TO 30 mn	0	0	1	0
COLD DEMI. TIME 3	0 TO 30 mn	0	0	0	0
COLD DEMI. TIME 4	0 TO 30 mn	0	0	0	0
HOT DEMI. TIME	0 TO 30 mn	1	1	1	1
HOT DEMI. TEMPERATURE	0 TO 95 °C	50	80	80	80
HOT DEMI. LUBRICANT	0 TO 360 s	0	0	0	0
DRYING	0 TO 30 mn	10	25	25	25
DRYING TEMPERATURE *	0 TO 95 °C	60	60	60	90

* IF DRYING TEMPERATURE ADJUSTEMENT OPTION

5.6 TABLE OF FACTORY-PROGRAMMED CYCLES 1400 UPSS - UPDPSS

Water consumption estimated per operation (according to the baskets used): 25 litres.
Output from acid and detergent pumps (according to the products used): 280 ml/min.

		Volumetric flasks	Bacteriology Virology	Chemistry Biology	Agarose Gel
FUNCTIONS	POSSIBILITY	CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH TIME	0 TO 30 mn	1	2	2	2
FILLING	HOT/COLD	H	H	H	H
PREWASH 1 TEMPERATURE	0 TO 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 TO 360 s	11	11	11	43
Option : PREWASH 1 DETERGENT 2	0 TO 360 s	0	0	0	0
PREWASH 2 TIME	0 TO 30 mn	0	0	0	1
FILLING	HOT/COLD	/	/	/	H
PREWASH 2 TEMPERATURE	0 TO 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 TO 360 s	/	/	/	0
Option : PREWASH 2 DETERGENT 2	0 TO 360 s	/	/	/	0
PREWASH 3 TIME	0 TO 30 mn	0	0	0	0
FILLING	HOT/COLD	/	/	/	/
PREWASH 3 TEMPERATURE	0 TO 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 TO 360 s	/	/	/	/
Option : PREWASH 3 DETERGENT 2	0 TO 360 s	/	/	/	/
WASH TIME	0 TO 30 mn	4	4	2	2
FILLING	HOT/COLD	H	H	H	H
WASH TEMPERATURE	0 TO 95 °C	50	85	70	90
WASH DETERGENT	0 TO 360 s	43	43	43	54
Option : WASH DETERGENT 2	0 TO 360 s	0	0	0	0
RUNNING WATER RINSE 1	0 TO 9	1	1	2	2
ACID RINSE TIME	0 TO 30 mn	2	2	2	2
NEUTRALISING ACID	0 TO 360 s	43	43	43	43
RUNNING WATER RINSE 2	0 TO 9	1	2	1	1
COLD DEMI. TIME 1	0 TO 30 mn	1	0	1	1
COLD DEMI. TIME 2	0 TO 30 mn	0	0	1	0
COLD DEMI. TIME 3	0 TO 30 mn	0	0	0	0
COLD DEMI. TIME 4	0 TO 30 mn	0	0	0	0
HOT DEMI. TIME	0 TO 30 mn	1	1	1	1
HOT DEMI. TEMPERATURE	0 TO 95 °C	50	80	80	80
HOT DEMI. LUBRICANT	0 TO 360 s	0	0	0	0
DRYING	0 TO 30 mn	0	0	0	0
SUPER DRYING	0 TO 30 mn	10	15	15	15
DRYING TEMPERATURE *	0 TO 95 °C	60	60	60	90

* IF DRYING TEMPERATURE ADJUSTEMENT OPTION

5.7 TABLE OF FACTORY-PROGRAMMED CYCLES 1600 UP - UPDP

Water consumption estimated per operation (according to the baskets used): 25 litres.
Output from acid and detergent pumps (according to the products used): 280 ml/min.

		Volumetric flasks	Bacteriology Virology	Chemistry Biology	Agarose Gel
FUNCTIONS	POSSIBILITY	CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH TIME	0 TO 30 mn	1	2	2	2
FILLING	HOT/COLD	H	H	H	H
PREWASH 1 TEMPERATURE	0 TO 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 TO 360 s	13	13	13	51
Option : PREWASH 1 DETERGENT 2	0 TO 360 s	0	0	0	0
PREWASH 2 TIME	0 TO 30 mn	0	0	0	1
FILLING	HOT/COLD	/	/	/	H
PREWASH 2 TEMPERATURE	0 TO 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 TO 360 s	/	/	/	0
Option : PREWASH 2 DETERGENT 2	0 TO 360 s	/	/	/	0
PREWASH 3 TIME	0 TO 30 mn	0	0	0	0
FILLING	HOT/COLD	/	/	/	/
PREWASH 3 TEMPERATURE	0 TO 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 TO 360 s	/	/	/	/
Option : PREWASH 3 DETERGENT 2	0 TO 360 s	/	/	/	/
WASH TIME	0 TO 30 mn	4	4	2	2
FILLING	HOT/COLD	H	H	H	H
WASH TEMPERATURE	0 TO 95 °C	50	85	70	90
WASH DETERGENT	0 TO 360 s	51	51	51	1mn04
Option : WASH DETERGENT 2	0 TO 360 s	0	0	0	0
RUNNING WATER RINSE 1	0 TO 9	1	1	2	2
ACID RINSE TIME	0 TO 30 mn	2	2	2	2
NEUTRALISING ACID	0 TO 360 s	51	51	51	51
RUNNING WATER RINSE 2	0 TO 9	1	2	1	1
COLD DEMI. TIME 1	0 TO 30 mn	1	0	1	1
COLD DEMI. TIME 2	0 TO 30 mn	0	0	1	0
COLD DEMI. TIME 3	0 TO 30 mn	0	0	0	0
COLD DEMI. TIME 4	0 TO 30 mn	0	0	0	0
HOT DEMI. TIME	0 TO 30 mn	1	1	1	1
HOT DEMI. TEMPERATURE	0 TO 95 °C	50	80	80	80
HOT DEMI. LUBRICANT	0 TO 360 s	0	0	0	0
DRYING	0 TO 30 mn	10	25	25	25
DRYING TEMPERATURE *	0 TO 95 °C	60	60	60	90

* IF DRYING TEMPERATURE ADJUSTEMENT OPTION

5.8 TABLE OF FACTORY-PROGRAMMED CYCLES 1600 UPSS - UPDPSS

Water consumption estimated per operation (according to the baskets used): 30 litres.
Output from acid and detergent pumps (according to the products used): 280 ml/min.

		Volumetric flasks	Bacteriology Virology	Chemistry Biology	Agarose Gel
FUNCTIONS	POSSIBILITY	CYCLE 01	CYCLE 02	CYCLE 03	CYCLE 04
PREWASH TIME	0 TO 30 mn	1	2	2	2
FILLING	HOT/COLD	H	H	H	H
PREWASH 1 TEMPERATURE	0 TO 95 °C	0	0	0	90
PREWASH 1 DETERGENT	0 TO 360 s	13	13	13	51
Option : PREWASH 1 DETERGENT 2	0 TO 360 s	0	0	0	0
PREWASH 2 TIME	0 TO 30 mn	0	0	0	1
FILLING	HOT/COLD	/	/	/	H
PREWASH 2 TEMPERATURE	0 TO 95 °C	/	/	/	0
PREWASH 2 DETERGENT	0 TO 360 s	/	/	/	0
Option : PREWASH 2 DETERGENT 2	0 TO 360 s	/	/	/	0
PREWASH 3 TIME	0 TO 30 mn	0	0	0	0
FILLING	HOT/COLD	/	/	/	/
PREWASH 3 TEMPERATURE	0 TO 95 °C	/	/	/	/
PREWASH 3 DETERGENT	0 TO 360 s	/	/	/	/
Option : PREWASH 3 DETERGENT 2	0 TO 360 s	/	/	/	/
WASH TIME	0 TO 30 mn	4	4	2	2
FILLING	HOT/COLD	H	H	H	H
WASH TEMPERATURE	0 TO 95 °C	50	85	70	90
WASH DETERGENT	0 TO 360 s	51	51	51	1mn04
Option : WASH DETERGENT 2	0 TO 360 s	0	0	0	0
RUNNING WATER RINSE 1	0 TO 9	1	1	2	2
ACID RINSE TIME	0 TO 30 mn	2	2	2	2
NEUTRALISING ACID	0 TO 360 s	51	51	51	51
RUNNING WATER RINSE 2	0 TO 9	1	2	1	1
COLD DEMI. TIME 1	0 TO 30 mn	1	0	1	1
COLD DEMI. TIME 2	0 TO 30 mn	0	0	1	0
COLD DEMI. TIME 3	0 TO 30 mn	0	0	0	0
COLD DEMI. TIME 4	0 TO 30 mn	0	0	0	0
HOT DEMI. TIME	0 TO 30 mn	1	1	1	1
HOT DEMI. TEMPERATURE	0 TO 95 °C	50	80	80	80
HOT DEMI. LUBRICANT	0 TO 360 s	0	0	0	0
DRYING	0 TO 30 mn	0	0	0	0
SUPER DRYING	0 TO 30 mn	10	15	15	15
DRYING TEMPERATURE *	0 TO 95 °C	60	60	60	90

* IF DRYING TEMPERATURE ADJUSTEMENT OPTION

5.9 USER CYCLE PROGRAMMING TABLE

FUNCTIONS	POSSIBILITY	CYCLE	CYCLE	CYCLE	CYCLE
PREWASH TIME	0 TO 30 mn				
FILLING	HOT/COLD				
PREWASH 1 TEMPERATURE	0 TO 95 °C				
PREWASH 1 DETERGENT	0 TO 360 s				
Option : PREWASH 1 DETERGENT 2	0 TO 360 s				
PREWASH 2 TIME	0 TO 30 mn				
FILLING	HOT/COLD				
PREWASH 2 TEMPERATURE	0 TO 95 °C				
PREWASH 2 DETERGENT	0 TO 360 s				
Option : PREWASH 2 DETERGENT 2	0 TO 360 s				
PREWASH 3 TIME	0 TO 30 mn				
FILLING	HOT/COLD				
PREWASH 3 TEMPERATURE	0 TO 95 °C				
PREWASH 3 DETERGENT	0 TO 360 s				
Option : PREWASH 3 DETERGENT 2	0 TO 360 s				
WASH TIME	0 TO 30 mn				
FILLING	HOT/COLD				
WASH TEMPERATURE	0 TO 95 °C				
WASH DETERGENT	0 TO 360 s				
Option : WASH DETERGENT 2	0 TO 360 s				
RUNNING WATER RINSE 1	0 TO 9				
ACID RINSE TIME	0 TO 30 mn				
NEUTRALISING ACID	0 TO 360 s				
RUNNING WATER RINSE 2	0 TO 9				
COLD DEMI. TIME 1	0 TO 30 mn				
COLD DEMI. TIME 2	0 TO 30 mn				
COLD DEMI. TIME 3	0 TO 30 mn				
COLD DEMI. TIME 4	0 TO 30 mn				
HOT DEMI. TIME	0 TO 30 mn				
HOT DEMI. TEMPERATURE	0 TO 95 °C				
HOT DEMI. LUBRICANT	0 TO 360 s				
DRYING	0 TO 30 mn				
SUPER DRYING	0 TO 30 mn				
DRYING TEMPERATURE *	0 TO 95 °C				

*	IF DRYING TEMPERATURE ADJUSTEMENT OPTION

CHAPTER 4 TRACEABILITY

These last years, TRACEABILITY has become in the hospital milieu in a crucial issue. The matter is to control permanently the correct development of the washing cycle and to obtain its validation.

TRACEABILITY enables the supervision of the correct performance of parameters such as washing, chamber filling, detergent taking, effective temperature, duration of the phases.

During the development of the program all the data must be registered, archived in paper support and, optionally, on data support.

You will find in this chapter the different systems of traceability proposed by our company.

1. PRINTER AND OUTPUT RS 232 (OPTION)

ITS ROLE :

The **LANCER PRINTER** checks permanently the right development of the washing cycle.

The printer permit the stock of the informations.

ITS RESULTS :

At the end of the program, the results are registered and archived, whether on a paper support by the mean of an horodated ticket, or a magnetic support via RS232 connection (provided).

EXAMPLE OF TICKET

LANCER

Signature :

Date:

Cycle period :
End :

INCIDENT OCCURED :

Time :
SUPER DRYING :

Time :
HOT DEMI. :
Emptying :
Recycling :
°C= 1: 2: 3:
°C= 1: 2: 3:
Additive intake :
Recycling (°C) :
Heating time :
°C Programmed :
Filling :

Time :
COLD DEMI.:
Emptying :
Recycling :
Filling :

Time :
RUNNING WATER 2 :
Emptying :
Recycling :
Filling :

Time :
ACID RINSE :
Emptying :
Recycling :
Filling :
Acid intake :

→

↓

Time :
RUNNING WATER 1 :
Emptying :
Recycling :
Filling :

Time :
REGENERATION :

Time :
WASH :
Emptying :
°C= 1: 2: 3:
°C= 1: 2: 3:
Recycling (°C) :
Heating time :
°C Programmed :
Filling :
Detergent intake :

Time :
PRE WASH 1 :
Emptying :
Recycling :
°C= 1: 2: 3:
°C= 1: 2: 3:
Recycling (°C) :
Heating time :
°C Programmed :
Filling :
Detergent intake :

Time :
RESINS RINSE :

Beginning :
Date :

Hours : Cycles :

Programme N°
COMPLETE VERSION
FUNCTIONS ANALYSIS

2. VALIDATION MONITOR, PRINTER AND OUTPUT (OPTION)

The UP Range washers-disinfectors are controlled by a programmable microprocessor. In order to obtain an independent verification of the washing-disinfecting process, a VALIDATION MONITOR is provided. The VALIDATION MONITOR is a microprocessor independent from the controller and equipped with its own sensors and clock.

ITS ROLE :

The LANCER VALIDATION MONITOR is a system of validation of the washing parameters. It checks permanently the right development of the washing cycle and allows its validation, as well as the stock of the information.

ITS RESULTS :

At the end of the program, the results are registered and archived, whether on a paper support by the mean of an horodated ticket, or on a magnetic support via a RS 232 connection (provided).

IMPRESSION OF A REPORT :

The date, the hour, the number of phases of the program as well as their denomination are printed in the ticket, these durations can vary from one cycle to the other.

The temperature is printed at constant intervals, which can be previously chosen. The value of the temperature is given by the LANCER VALIDATION MONITOR, and can be compared to the programmed one, which is printed as well.

At the end of the cycle, the hour of ending of the cycle and its complete duration are indicated at the bottom of the ticket. This ticket is called “complete ticket”; it is generally used during the installation phase of the washer, in order to determine the best washing and disinfecting procedure and to periodically validate the washer.

A smaller ticket, “simplified ticket”, is enough for the ordinary washings. It simply indicates the date and the hour of start and end of the cycle, the number of programs and their durations.

If an incident occurs during the washing, a complete ticket will be automatically printed, showing all the phases executed before the failure.

THE SHOWED TEMPERATURE IN THE DISPLAY IS THE TEMPERATURE AT THE BOTTOM OF THE CHAMBER (PRE-SET REGULATED TEMPERATURE).
THE TEMPERATURE PRINTED ON THE TICKET CORRESPONDS TO THE REAL TEMPERATURE IN THE CHAMBER.
A DIFERENTIAL OF TEMPERATURE CAN EXIST.

EXAMPLE OF TICKET

LANCER

Signature :

Date:

Cycle period :
End :

INCIDENT OCCURED :

Time :
SUPER DRYING :

Time :
HOT DEMI. :
Emptying :
Recycling :
°C= 1: 2: 3:
°C= 1: 2: 3:
Additive intake :
Recycling (°C) :
Heating time :
°C Programmed :
Filling :

Time :
COLD DEMI.:
Emptying :
Recycling :
Filling :

Time :
RUNNING WATER 2 :
Emptying :
Recycling :
Filling :

Time :
ACID RINSE :
Emptying :
Recycling :
Filling :
Acid intake :

→

↓

Time :
RUNNING WATER 1 :
Emptying :
Recycling :
Filling :

Time :
REGENERATION :

Time :
WASH :
Emptying :
°C= 1: 2: 3:
°C= 1: 2: 3:
Recycling (°C) :
Heating time :
°C Programmed :
Filling :
Detergent intake :

Time :
PRE WASH 1 :
Emptying :
Recycling :
°C= 1: 2: 3:
°C= 1: 2: 3:
Recycling (°C) :
Heating time :
°C Programmed :
Filling :
Detergent intake :

Time :
RESINS RINSE :

Beginning :
Date :

Hours : Cycles :

Programme N°
COMPLETE VERSION
FUNCTIONS ANALYSIS

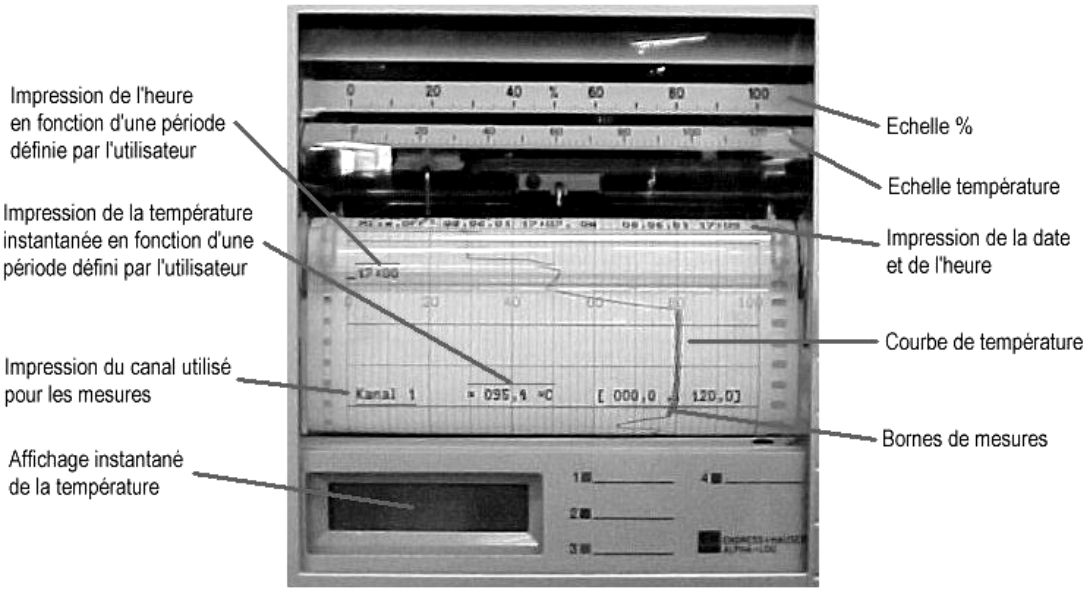
3. RECORDER (OPTION)

3.1 USE AND ADJUSTEMENT

Refer to the manual of the apparatus.

3.2 PEN CHART RECORDER

The pen chart recorder enables the register of a curve of temperature on a paper support.


Impression de l'heure en fonction d'une période définie par l'utilisateur
Impression de la température instantanée en fonction d'une période défini par l'utilisateur
Impression du canal utilisé pour les mesures
Affichage instantané de la température
Echelle %
Echelle température
Impression de la date et de l'heure
Courbe de température
Bornes de mesures

4. VALITRACE (OPTION VTRACE MON or OPTION VTRACE MUL)

V@litrace is a software developed by LANCER to meet current needs on traceability and information communication. V@litrace transfers the information given by the controller of the washer on a separate PC, and creates a database permitting to:

- stock all the information about all the cycles run with the washer.
- print the cycles on a standard PC printer.
- search information about the cycles by using filters (type of cycle, user code, alarms, etc.)
- create links between the washer and centralised technical management systems or traceability systems existing on site (to be studied depending on the system used).

CHAPTER 5 MAINTENANCE OF THE WASHER

NEVER USE OR PLACE IN THE WASHER REMMANTS OF PRODUCTS SUCHS AS ACETONE, SOLVANTS, OLI, SULFO-CROMIC, PETROL DERIVEDS, ACIDS (SULFURIC, NITRIC, CLORHIDRIC, EVEN AT LOW CONCENTRATIONS), ETC.

DURING THE CLEANING OPERATIONS INSIDE THE CHAMBER, IT IS CONVENIENT TO BE PROVIDED WITH GLOVES AND TO PAY ATTENTION TO THE EVENTUAL EDGE TOOLS (NEEDLES, INSTRUMENTS…) WHICH COULD BE PLACED INSIDE THE FILTERS OF THE BOTTOM OF THE CHAMBER.

1. REGENERATING OF SOFTENER

Only for washers with regeneration.

This function is automatic (masked time).

When the display unit indicates "SALT RECHARGE", it is essential to fill the salt pot located at the bottom of the chamber, inside the washer. Use special softening, regenerating salt.

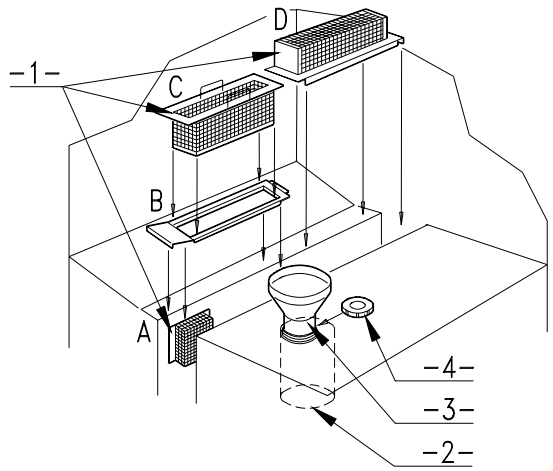
THE LID OF THE POT MUST BE CORRECTLY CLOSED AFTER FILLING

2. FITTING THE 3 CHAMBER FILTERS AND SALT POT FILLING

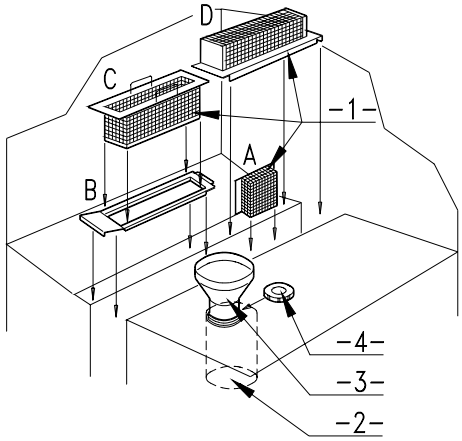
Clean the filters after each cycle

Reinstall them correctly in their housing at the bottom of the chamber

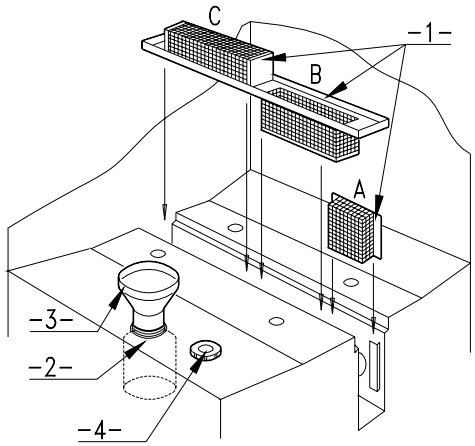
910 UP/UPSS



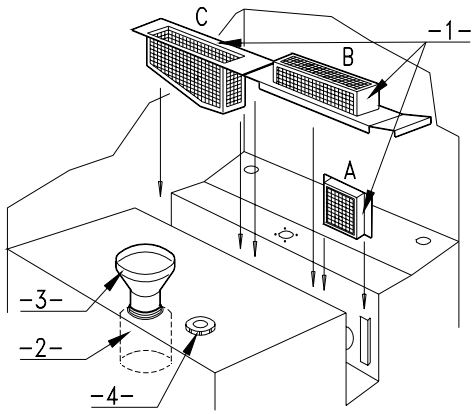
1300 UP/UPSS



1400 UP/UPSS



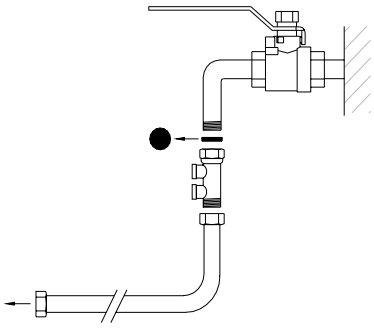
1600 UP/UPSS



ORDER OF FITTING:
A -> B -> C -> (D)

1 : FILTERS
2 : SALT POT*
3 : FILLING FUNNEL*
4 : SALT POT CAP*
* *only for washer with salt pot*

3. STRAINERS FILTERS



Check the cleanness of the strainer filters and clean them if needed.

The contained remnants in the filters increase the filling times and could activate the alarm "LACK OF WATER".

The filters should be replaced each year.

3.1 DRYING AIR FILTERS

(Only on washers with air filter.)

The life duration of the drying air filters depends on the rate of use of the washer-disinfector and the quality of the near air.
We recommend the preventive change of the drying air filters at least one time every year.

Check visually the state of the drying air filters every 6 months

3.2 SHUT DOWN AT END OF DAY

a) SHUT OFF THE WATER INLET COCKS so that the valves are not left pressurised. Do not forget to open them again before using the appliance again.

b) SWITCH OFF THE APPLIANCE.

4. EXTERNAL MAINTENANCE OF THE WASHER-DISINFECTOR

LANCER washers are entirely covered with panels (bodywork) in stainless steel AISI 304L.

Cleaning method :

The periodic maintenance cleaning must be done with a cleaning product.
Should the periodic maintenance have been largely forgotten, we recommend the use of a specific cleaning product.

The product must be applied with the help of a rag or a soft sponge, and always polishing the stainless steel in the sense of the brushing to avoid the risk of stripes.
For the drying, the best is using a rubber scraper similar to the one used to the clean windows. This will avoid watering you can have with a rap cleaning.

PRUDENCE:
TRY TO AVOID THE PROJECTIONS OF LIQUID OVER THE WASHER-DISINFECTOR.

Cleaning products :

LANCER offers a maintenance product for stainless steel in the market under the name of LANCERSHINE.
A safe and efficient aerosol cleaning product for a use in the external side of the stainless machines and other equipments to be washed, assuring a very professional finishing.
Available in container of 450ml. Ref : LANCERSHINE

Detergents, soaps :

All the detergents, soaps or cleaning products found in shops can normally be used, but they MUST NOT contain chlorinated products. Domestic soaps for dishwashers or washing machines are particularly adapted to the periodical cleaning.

Abrasive dusts :

These products can stripe the stainless steel surfaces and modify then the aspect, at least locally. Even that, their use can be useful to eliminate by scraping the adherent spots.

Acid products :

The resource to these acid-cleaning products must only be used in specific cases.
Vinegar (acetic acid) can be used to remove stains left by minerals.
There are phosphoric acid-based or nitric acid-based products specially conceived for the cleaning of stainless steels. It is convenient to follow strictly the instructions given by theirs manufacturers.
The chloric disinfectants must only be used with caution : diluted solution in cold water, short contact time, abundant rinsing

IN ALL THE CASES IT IS NECESSARY TO PROCEDE AFTER THE CLEANING TO AN ABONDANT AND CAREFUL RINSING (WITH A SOFT TEXTILE), IN ORDER TO ELIMINATE EVERY TRACE OF THE USED PRODUCT.

5. PREVENTIVE MAINTENANCE

LANCER'S TECHNICAL ASSISTANCE SERVICE recommends to all the users at least one annual preventive maintenance visit.

The preventive maintenance reduces the risks of stops of the washer-disinfector due to breakdowns and enables enlarge the life duration of the equipements.

Depending on the countries where the washer-disinfector is used and the local norms, a higher frequency of preventive maintenance visits can be necessary.

CHAPTER 6 INCIDENTS

1. INCIDENTS

1.1 THE DETERGENT OR NEUTRALIZING AGENT DOES NOT ENTER THE WASHER

- The tube is blocked.
- The tank is empty.
- The pump hose is pinched.

1.2 THE WASHER DOES NOT FUNCTION

- It is not connected to the power supply.
- There is mains power.
- The circuit-breaker protecting the electrical control circuit has been tripped. CONSULT THE TECHNICAL DEPARTMENT.

1.3 ABNORMAL NOISE

- One of the washing arms is touching one or more of the items to be washed.
- Check the loading of the washer.

2. LACK OF PRODUCTS

- LACK OF SALT
(only for washers with regeneration)
If there is a lack of salt, the following message is displayed at the start of the cycle when you press the START key.

A L A R M
S A L T R E C H A R G E

It is essential to fill the salt pot located inside the washer.

- LACK OF DETERGENT
(Only for washers with level floats)

A L A R M
D E T E R G E N T R E C H G .

It is indispensable to fill the tank.

- LACK OF NEUTRALIZING ACID
(Only for washers with level floats)

A L A R M
A C I D R E C H A R G E

It is indispensable to fill the tank.

- LACK OF ADDITIVE PRODUCT (DETERGENT 2)
(Only for washers with level floats and using a additive product)

A L A R M
D E T E R G E N T 2

It is indispensable to fill the tank.

To continue cycle see CHAPTER 2 BEFORE YOU START part CHANGE OF THE TANKS

Remark : *(only for washers with key override)*
To continue the cycle after filling the receptacle:
- switch off alarm key button,
- press on START button to validate alarm,
- switch on alarm key button

3. FAULT ALARMS

These alarms inhibit operation of the washer. To clear the alarm mode, the washer must be switched off by pressing switch .

OR

(Only for washers with key override)

To leave alarm mode:
- switch off alarm key button,
- switch off power, throwing
- switch on alarm key button

FILLING FAULT

F I L L I N G F A U L T
P R E W A S H 1

INCIDENT : During the filling phase of PREWASH 1, the washer-disinfector has not reached its level of water before the development of the normal filling time, defined in factory.

ACTION : Check the openings of the taps, the state of water arrival tubes and filters.

*This message can also appear during the phases **PREWASH 2, PREWASH 3, WASH, RUNNING WATER RINSE 1, ACID RINSE, RUNNING WATER RINSE 2, COLD DEMI. WATER RINSES 1 to 4 and HOT DEMI. WATER RINSE.***

EMPTYING FAULT

E M P T Y I N G F A U L T
P R E W A S H 1

INCIDENT : At the end of PREWASH 1, the washer has not been completely emptied by the end of the normal emptying time defined in the factory.

ACTION : Check that there is no restriction on the emptying line, that the emptying pump and its pipes are not blocked and that the chamber filters are not clogged.

*This message can also appear during the phases **PREWASH 2, PREWASH 3, WASH, RUNNING WATER RINSE 1, ACID RINSE, RUNNING WATER RINSE 2, COLD DEMI. WATER RINSES 1 to 4 and HOT DEMI. WATER RINSE.***

PROBE FAULT

A L A R M
P R O B E D E F E C T 1

INCIDENT : The probe that checks the water temperature in the chamber is disconnected or defective.
Probe n°1 temperature probe of chamber
Probe n°2 temperature probe of chimney drying (only with option drying temperature adujstement)
Probe n°3 temperature probe of chamber drying (only with option drying temperature adujstement)
Probe n°4 not used

ACTION : Check the electric connection and the state of the probe.

*This message can also appear for **the probes 2,3, and 4.***

HEATING EXCESS

H E A T I N G E X C E S S
P R E W A S H 1

INCIDENT : During the heating phase of the prewash 1, this message appears if the temperature increase is 30°C higher than the programmed temperature. To obtain this alarm, programmed temperature has to be preset to 50°C minimum.

ACTION : Check the electric connection, the steam valve (steam heating option), the pressure of the steam circuit (steam heating option) and the safety thermal cut-out close to heating elements.

*This message can also appear during the phases **PREWASH 2, PREWASH 3, WASH, DISINFECTION***

HEATING FAULT

H E A T I N G F A U L T
P R E W A S H 1

INCIDENT : During the heating phase of the prewash 1, this message appears if the temperature increase is not enough rapid.

ACTION : Check the electric connection, the steam valve (steam heating option), the pressure of the steam circuit (steam heating option) and the safety thermal cut-out close to heating elements.

This message can also appear during the phases ***PREWASH 2, PREWASH 3, WASH, DISINFECTION.***

EXTERNAL INTERRUPTION

(Only on washers equipped with Validation Monitor - option)

E X T . I N T E R R U P .
P R E W A S H 1

INCIDENT : The Validation Monitor locks the working of the machine - option.

ACTION : Wait the complete impression of the ticket.

Note:

The following alarm does not lock the development of the cycle.

- FULL BASIN

A L A R M
P R O B E S D E F E C T

INCIDENT : In the case the chamber contains water at the beginning of the cycle, either following the interruption of the previous cycle or due to an abnormal addition of water from outside.

ACTION The washer is emptied and the cycle then proceeds normally.

VALIDATION MONITOR CONNECTION

(Only for washers equipped with Validation Monitor - option)

V A L I D A T I O N M O N I T
S U P E R V . C O N N E C T ?

INCIDENT : The connection to the Validation Monitor is not correct. Information between main board and Validation Monitor are done through a flat ribbon – serial link. If this connection is not correct when switching the washer ON, an alarm appears.

ACTION : Push the key START so as the cycle will continue with no further control.

PRINTER CONNEXION

(Only for washers equipped with printer - option)

I M P R I M E U R
C O N N E C T E D ?

INCIDENT : The connection to the Printer is not correct. Information between main board and Validation Monitor are done through a flat ribbon – serial link. If this connection is not correct when switching the washer ON, an alarm appears.

ACTION : Push the key START so as the cycle will continue with no further control.

CHAPTER 7 PRODUCT HEALTH AND SAFETY DATA SHEET

You will find in this chapter all the indications concerning the safety data of the LANCER washing products.

1 PRODUCT HEALTH AND SAFETY DATA SHEET – DETERGENT « L.L.L.. »

2 PRODUCT HEALTH AND SAFETY DATA SHEET – NEUTRALIZANT « N.L.L. »

3 PRODUCT HEALTH AND SAFETY DATA SHEET – LUBRICANT « V.L.L. »

4 PRODUCT HEALTH AND SAFETY DATA SHEET – LANCERSHINE

1. SAFETY DATA SHEET - DETERGENT "L.L.L."

1 - IDENTIFICATION OF THE PREPARATION

LANCER INDUSTRIE
30 BD DE L'INDUSTRIE Z.I. DU PAHIN
F-31170 TOURNEFEUILLE
Tel. +33 (0)5 61 15 11 11 Fax. +33 (0)5 61 15 16 16
COMMERCIAL DESIGNATION "L.L.L." DETERGENT
Poison Centre : Tel. +33 (0)5 61 49 33 33

2 - COMPOSITION INFORMATION

Composition : Product contains amongst other ingredients :
Sodium Hydroxide 4,8% w/w
Nitrilo Triacetic Acid
Trisodium Salt
© Corrosive - *R34*

3 - HAZARDS INFORMATION

Corrosive. Will cause severe burns to skin, eyes and digestive system.

4 - FIRST AID MEASURES

Skin contact : Wash with plenty of water and seek medical advice.
Eye contact : Wash with plenty of water and seek immediate medical advice.
Ingestion : Give milk or water to drink and seek immediate medical attention.
DISCOURAGE VOMITING.
Inhalation : No measurable levels of inhalation likely.

5 - FIRE FIGHTING MEASURES

Flash point : N/A.
Product not flammable.
No special procedures necessary
Unusual Fire Hazards : Contact with hot white metals in a fire may yield Hydrogen which can be the source of explosion in a fire

6 - ACCIDENTAL RELEASE MEASURES

Wear protective clothing to avoid contact with skin and eyes.
For small spillages, flush away with copious amounts of water.
For larger spillages, soak with sand or other non flammable absorbent and dispose of. Flush area with water.

7 – PRECAUTIONS FOR STORAGE, USE AND HANDLING

Protect from extremes of temperature
Avoid contact with skin and eyes

USE BEFORE END OF 2 years after its production date indicate with a label on the container.
Example: Date code A1241 means made the 241st day of the year 2001

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

SKIN PROTECTION : PVC or rubber gloves must be worn.
EYE PROTECTION : Goggles or face protector must be worn
Respiratory PROTECTION : Not required

9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance :	Pale straw coloured, non-foaming liquid.
Odour :	Ammonia
S.G. at 20°C :	1.14 - 1.16
pH :	14
Solubility in water :	Miscible
Biodegradable	

NOTE : A slight brown precipitate can sometimes appear in the bottom of the can. It does not change the chemical properties of the product.

DIRECTIVE 2001/58/EC OF 27/07/2001 *INDICE : G* *DATE: AUGUST 2003*
FIDE 002&

PRODUCT NAME : *DETERGENT L.L.L.*

(SODIUM HYDROXIDE 4.8% w/w)

10 - STABILITY & REACTIVITY

Stable under normal conditions of use and storage.
Avoid contact with Aluminium & Zinc metal components.
Not suitable for use on non-ferrous metals.

11 - TOXICOLOGICAL INFORMATION

Liquid and mist causes irritation and corrosion to skin, eyes, respiratory and digestive tracts.
Unlikely to be absorbed via the skin.

12 - ECOLOGICAL INFORMATION

Sodium Hydroxide is classed as slightly toxic to living resources - LC50 96hrs 10-100 mg/l.
Contains Sodium Hydroxide which in high concentrations in receiving waters will injure aquatic life by the effect on pH.
No evidence of bioaccumulation or tainting of seafood.
BIODEGRADABLE

13 - DISPOSAL CONSIDERATION

Respect National and Local regulation. If you are allowed, flush away with copious amounts of water.
For larger quantities seek advice from a specialist waste disposal company.
Do not use this tank for other products.

14 - TRANSPORT INFORMATION

	RID/ADR	IMDG
Class	8	8
Group - Number	8 - 42°b	
Label	8	8
Hazard Code	80	
UN Number	1824	1824
Code page		8226
EMS		8-06
MFAG		705
Packing Group	II	II

15 - REGULATORY INFORMATION

LABELS : Corrosive © Contains 4.8% Sodium Hydroxide
R34 - Causes burns
S2 - Keep out of reach of children
S7 - Keep locked up
S26 - In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
S27 - Take off immediately all splashed or dirty clothing
S36/37/39 - Wear suitable clothing, gloves and eye / face protection.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)

16 - OTHER INFORMATION

This safety data sheet completed with those followings information can be used as TECHNICAL DATA SHEET.

This product was developed for washing Laboratory glassware in machine exclusively. It is not intended to be used for manual operation.
The concentration required is 1 %.
In the machine, the intake time of the detergent rules the concentration of this product during the cycle. Please refer to the user manual of the washer.
R34 - Causes burns
The information contained in this sheet is based on the state of our knowledge regarding the product concerned at the specified date. This information is given in good faith. The user's attention is, furthermore, drawn to the possible risks involved when a product is used for other purposes than those for which it is designed.
This information does not, in any circumstances, dispense with the need for users to know and apply all the provisions regulating their activities. The user shall have sole responsibility for the precautions related to the use this product is put to.
The purpose of all the statutory provisions referred to is to help users to fulfil the obligations incumbent on them when using this hazardous product.
This list must not be considered exhaustive and does not release the user from checking the stated requirements regarding the storage and handling of the product for which the user is only responsible.

DIRECTIVE 2001/58/EC OF 27/07/2001 *INDICE : G* *DATE: AUGUST 2003*
FIDE 002&

2. SAFETY DATA SHEET - NEUTRALIZING AGENT "N.L.L."

1 - IDENTIFICATION OF THE PREPARATION

LANCER INDUSTRIE
30 BD DE L'INDUSTRIE Z.I. DU PAHIN
F-31170 TOURNEFEUILLE
Tel. +33 (0)5 61 15 11 11 Fax. +33 (0)5 61 15 16 16
COMMERCIAL DESIGNATION "N.L.L." NEUTRALIZING AGENT
Poison Centre : Tel. +33 (0)5 61 49 33 33

2 - COMPOSITION INFORMATION

Composition : Product contains amongst other ingredients :
Acetic Acid : 20% w/w
OEL (Acetic Acid) 10ppm long term / 15ppm short term
IRRITANT - R36/38

3 - HAZARDS INFORMATION

Irritant. Irritating to eyes, skin, digestive system and respiratory system.
Burns can occur.
Spillage will affect vegetation.
Slightly toxic to aquatic life.

4 - FIRST AID MEASURES

Skin contact : Wash with plenty of water and seek medical advice if any irritation persists.
Eye contact : Wash with plenty of water and seek immediate medical advice.
Ingestion : Give milk or water to drink and seek immediate medical advice. DO NOT INDUCE VOMITING.
Inhalation : Remove person to fresh air and seek medical advice if effects are prolonged.

5 - FIRE FIGHTING MEASURES

Flash point : N/A. However combustible and may liberate toxic fumes of carbon monoxide in a fire.
Firefighters to wear breathing apparatus and full protective clothing. Use extinguishing medium appropriate to the other materials involved.
Use fog equipment or fine spray. Extinguish preferably with alcohol foam, dry chemical, carbon dioxide or water spray.
Keep containers cool with waterspray.

6 - ACCIDENTAL RELEASE MEASURES

Wear protective clothing. Ventilate the area well if possible.
For small spillages, flush away with copious amounts of water.
For larger spillages, contain with sand and earth and transfer to a container for disposal in accordance with local authorities. Inform water authorities if spillage has entered water course.

7 – PRECAUTIONS FOR STORAGE, USE AND HANDLING

Protect from extremes of temperature
Store in a well ventilated area and keep containers closed.
No smoking

USE BEFORE END OF 2 years after its production date indicate with a label on the container.
Example: Date code A1241 means made the 241st day of the year 2001.

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

SKIN PROTECTION : PVC / rubber gloves must be worn.
EYE PROTECTION : Wear chemical goggles.
RESPIRATORY PROTECTION : Ensure adequate ventilation. In the event where significant exposure is possible, i.e. spillage or fire, wear breathing apparatus and full protective clothing.

9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance :	Clear, colourless liquid.
Odour :	Vinegar like
S.G. at 20°C :	1.025 - 1.030
pH :	0 - 1
Solubility in water :	Miscible
Biodegradable.	

DIRECTIVE 2001/58/EC OF 27/07/2001 *INDICE: G* *DATE: AUGUST 2003*
FIDE 004&

PRODUCT NAME : *NEUTRALIZING AGENT N.L.L.*

(ACETIC ACID)

10 - STABILITY & REACTIVITY

Stable under normal storage conditions. Reacts with alkalis and oxidising agents.
Do not mix with any other cleaning chemical.

11 - TOXICOLOGICAL INFORMATION

For Pure Acetic Acid - Acute toxicity data :
INHAL TDLO (human) = 816ppm for 3 mins
HIGHLY IRRITANT
ORAL LD50 (rat) = 3300 mg/Kg
DERMAL LD50 (rabbit) = 1060 mg / Kg

12 - ECOLOGICAL INFORMATION

OEL (Acetic Acid) 10ppm long term/15ppm short term for Pure Acetic Acid
Practically non-toxic to living resources -LC50 96hrs 100-1000 mg/l.
Slightly toxic to aquatic life - TLM 96hrs 10-100mg/l.
No evidence of bioaccumulation or tainting of seafood.
BIODEGRADABLE

13 - DISPOSAL CONSIDERATION

If need to neutralise, do so very carefully with Soda ash - do not use strong alkalis as excessive heat is generated.
Respect National and local regulation.
If you are allowed, the small quantities can be flushed away with copious amounts of water.
For larger quantities, seek advice from a specialist waste disposal Company.
Do not use this tank for other products.

14 - TRANSPORT INFORMATION

	RID/ADR	IMDG
Class	8	8
Group - Number	8-32°c	
Label	8	8
Hazard Code	80	
UN Number	2790	2790
Page code		8100
EMS		8-05
MFAG		700
Packing Group	III	III

15 - REGULATORY INFORMATION

LABELS : Irritant (Xi) - Contains 20% Acetic Acid.
R36/38 - Irritating to skin and eyes
S2 - Keep out of reach of children
S7 - Keep locked up
S23 - Do not breathe gas/fumes/vapour/spray
S26 - In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
S37 - Wear suitable gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)

16 - OTHER INFORMATION

This safety data sheet completed with those followings information can be used as TECHNICAL DATA SHEET.
This product was developed for the rinsing of Laboratory glassware *in machine exclusively. It is not intended to be used for manual operation. T* his product eliminates detergent basic, deposit and calcareous spoors.
The concentration required is 1 %.
In the machine, the intake time of the neutralizing agent rules the concentration of this product during the cycle. Please refer to the user manual of the washer.
R36/38 - Irritating to skin and eyes
The information contained in this sheet is based on the state of our knowledge regarding the product concerned at the specified date. This information is given in good faith. The user's attention is, furthermore, drawn to the possible risks involved when a product is used for other purposes than those for which it is designed.
This information does not, in any circumstances, dispense with the need for users to know and apply all the provisions regulating their activities. The user shall have sole responsibility for the precautions related to the use this product is put to.
The purpose of all the statutory provisions referred to is to help users to fulfil the obligations incumbent on them when using this hazardous product.
This list must not be considered exhaustive and does not release the user from checking the stated requirements regarding the storage and handling of the product for which the user is only responsible.

DIRECTIVE 2001/58/EC OF 27/07/2001 *INDICE: G* *DATE: AUGUST 2003*
FIDE 004&

3. PRODUCT HEALTH AND SAFETY DATA SHEET - LUBRICANT "V.L.L."

1 - IDENTIFICATION OF PRODUCT AND COMPANY

LANCER INDUSTRIE
30 BD DE L'INDUSTRIE Z.I. DU PAHIN
F-31170 TOURNEFEUILLE
Tel. +33 (0)5 61 15 11 11 Fax. +33 (0)5 61 15 16 16
COMMERCIAL DESCRIPTION "V.L.L." LUBRICANT
Poison centre: Tel. +33 (0)5 61 49 33 33

2 - INFORMATION ON CONSTITUENTS

Composition: Non-ionic, surface-active agent: 5 to 15% *CAS number 9003-11-6*
Isopropanol : *<5%* *CAS number 67-63-0*

3 - IDENTIFICATION OF HAZARDS

General n.a. *Symbol n.a.*

4 - FIRST AID

Contact with the skin: Wash with copious quantities of water.
Contact with the eyes: Rinse with copious quantities of water.
Ingestion: Rinse the mouth with copious quantities of water.
DO NOT CAUSE VOMITING.
For serious cases: consult a doctor.

5 - FIRE-FIGHTING MEASURES

Use carbon dioxide foam or powder fire extinguishers or water spraying.
Spray receptacles copiously with water to cool them.

6 - STEPS TO BE TAKEN IN CASE OF ACCIDENTAL DISPERSION

After recovering the product, clean the premises with copious quantities of water.
Warn the relevant authorities in the event of major dispersion.

7 - PRECAUTIONS FOR STORAGE, USE AND HANDLING

HANDLING:
STORAGE: Keep the receptacle tightly closed.

USE BEFORE END OF 2 years after its production date indicate with a label on the container.
Example: 0207001 means made in July the 2nd, 2001

8 - CONTROL OF EXPOSURE - INDIVIDUAL PROTECTION

BREATHING PROTECTION: Not necessary
PROTECTION OF HANDS: Not necessary
PROTECTION OF EYES: Wear protective goggles.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state - Aspect (form, colour):	Colourless liquid
Density at 20°C:	1.05 +/- 0.5 kg/l
pH:	7.5 +/- 0.5
Solubility in water:	complete
Flash point:	not measurable
Viscosity:	not measurable

10 - STABILITY AND REACTIVITY

THERMAL DECOMPOSITION: Not measurable
Hazardous reactions: Not measurable

DIRECTIVE 2001/58/EC OF 27/07/2001 *INDICE : F* *DATE: AUGUST 2003*
FIDE 005&

NAME OF PRODUCT: *LUBRICANT V.L.L.*

(NON-IONIC AGENT)

11 - TOXICOLOGICAL INFORMATION

Ingestion: LD50 > 5000 mg/kg

12 - ECOLOGICAL INFORMATION

The surface-active agents contained in this preparation are biodegradable and comply with the legislation in force.

13 - CONSIDERATIONS REGARDING ELIMINATION

Elimination according the local or national recommendations.

14 - INFORMATION REGARDING TRANSPORT

	RID/ADR	IMDG
Class		Non-classified product
UN Number		

15 - STATUTORY INFORMATION

LABELS:
S2 - Keep out of reach of children.
S7 - Keep the receptacles tightly closed.
S26 - In case of contact with the eyes, wash immediately with copious quantities of water and consult a doctor.
S28 - In case of contact with the skin, wash immediately with copious quantities of water.
S39 - Wear protective equipment for the eyes.
S62 - In case of ingestion: do not cause vomiting. Immediately consult a doctor and show the label. (Rinse the mouth with water.)

16 - OTHER INFORMATION

This safety data sheet completed with those followings information can be used as TECHNICAL DATA SHEET.

This product was developed to be added to the final rinsing water, preferably demineralised. It allows the depositing of a protective film on instrumentation and lubrication of instruments with axis of rotation. *It is not intended to be used for manual operation.*
The concentration required is 0.1 %.
In the machine, the intake time of the lubricant rules the concentration of this product during the cycle. Please refer to the user manual of the washer.

The information contained in this sheet is based on the state of our knowledge regarding the product concerned at the specified date. This information is given in good faith. The user's attention is, furthermore, drawn to the possible risks involved when a product is used for other purposes than those for which it is designed.
This information does not, in any circumstances, dispense with the need for users to know and apply all the provisions regulating their activities. The user shall have sole responsibility for the precautions related to the use this product is put to.
The purpose of all the statutory provisions referred to is to help users to fulfil the obligations incumbent on them when using this hazardous product.
This list must not be considered exhaustive and does not release the user from checking the stated requirements regarding the storage and handling of the product for which the user is only responsible.

DIRECTIVE 2001/58/EC OF 27/07/2001 *INDICE : F* *DATE: AUGUST 2003*
FIDE 005&

4. PRODUCT HEALTH AND SAFETY DATA SHEET – LANCERSHINE

1 – IDENTIFICATION OF PREPARATION

LANCER INDUSTRIE
30 BD DE L'INDUSTRIE Z.I. DU PAHIN
F-31170 TOURNEFEUILLE
Tel. +33 (0)5 61 15 11 11 Fax. +33 (0)5 61 15 16 16
COMMERCIAL DESCRIPTION : LANCERSHINE
Poison centre : Tel. +33 (0)5 61 49 33 33
USAGE : Stainless Steel Cleaner & Polish

2 – COMPOSITION INFORMATION

*R1*Component	Classification	Concentration	Risk phrases
Hydrocarbon Distillate (F)	Irritant	30% → 50%	R65 Harmful : May cause lung damage if swallowed
Liquefied Petroleum Gas	Not Classifiable	15% → 30%	
Mineral Oil			

Composition Comments : Blend of hydrocarbon distillate and mineral oil. Aerosol propelled by liquefied petroleum gas.

3 – HAZARDS INFORMATION

Classification : Classified as extremely flammable.
Health Hazards : For aspiration effects see other information.
Hydrocarbon distillate (F) and liquefied petroleum have OES's of :
- 500 à 1250 mg/m3 for short term exposure (10 min)
- 400 à 1000 mg/m3 for long term exposure (8 h)

Environmental Hazards : No specific environmental information available.

4 – FIRST AID MEASURES

Eye Contact : Wash with plenty of water for at least 15mins. Seek immediate medical advice if irritation persists.

Skin Contact : Wash with soap or mild detergent and water. Seek immediate medical advice if any irritation persists.

Ingestion : Rinse mouth thoroughly with water. Give large amounts of water/milk. Contact physician if large quantity has been consumed.

Inhalation : Remove to fresh air. Seek immediate medical advice if any irritation persists.

5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Powder, foam or CO2 extinguishers may be used.
SPECIAL PROCEDURES : Use water extinguishers to keep fire-exposed containers cool and disperse vapours. Possible risk of container rupture when exposed to fire/high temperatures. Contents of aerosol will add to fuelling of fire. Fire or high temperatures can create hazardous decomposition products (Oxide of carbon)
PROTECTIVE EQUIPMENT : Breathing apparatus should be worn if exposure to fumes is likely.

6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Remove all sources of ignition.
CLEAN UP : Absorb with sand or other suitable non-flammable absorbent media, and dispose of in a suitable container.

7 – PRECAUTIONS FOR STORAGE, USE AND HANDLING

HANDLING AND STORAGE :

PERSONAL PRECAUTIONS :
Avoid contact with skin and eyes. The use of a barrier cream is recommended but not as a substitute for gloves. Keep away from heat, sparks and open flames.
STORAGE :
Caution: Pressurised container. Do not expose to temperatures exceeding 50°C. Do not puncture or incinerate even when empty. Do not spray onto naked flame or any incandescent material. Keep away from heat, sparks and open flames. Store in a cool, dry place away from all sources of heat including direct sunlight.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS : No specific controls except this product must not be used in a confined space without good ventilation.
RESPIRATORY PROTECTION : Not required under normal use but may be required under exceptional circumstances when excessive air contamination exists.
HAND PROTECTION : Chemical resistant gloves required for prolonged or repeated use.
EYE PROTECTION : Wear chemical resistant goggles/glasses if there is a risk of eye contact.
SKIN PROTECTION : No specific protection required in normal use.

DIRECTIVE 2001/58/EC OF 27/07/2001 INDICE : B DATE: AUGUST 2003
FIDE 011&

PRODUCT NAME : LANCERSHINE

9 – PHYSICAL AND CHEMICAL PROPRIETES

Appearance :	aerosol
Odour :	characteristic
SG at 20°C :	N/A
pH :	N/A
Solubility :	immiscible
Flash point :	< 21°C

10 – STABILITY AND REACTIVITY

Stability : Stable under normal storage conditions.
Conditions to avoid : Avoid heat, flames and other sources of ignition.
Materials to avoid : Avoid contact with strong oxidising agents.
Decomposition products : Fire or high temperatures can create oxides of carbon and hydrocarbon combustion products.

11 – TOXICOLOGICAL INFORMATION :

Classification : This product is not classified as hazardous.
Eye contact : Liquid and mist may cause mild irritation.
Skin contact : Prolonged or repeated contact may cause irritation and/or dermatitis.
Inhalation : High concentration of vapour may cause dizziness, nausea.
Ingestion : Liquid and mist may cause irritation to respiratory tract and intestinal system.

12 – ECOLOGICAL INFORMATION :

Biodegradability : No specific ecological information available.

13 – DISPOSAL CONSIDERATION

Absorb with sand or other non-flammable absorbent media, and dispose of in a suitable container.
Waste material : Do not puncture or incinerate even when empty. Dispose of in accordance with local authority requirements.
Contact local authorities for further information.

14 – TRANSPORT INFORMATION

	RID/ADR	IMDG
Class	2	2
Group- Number	5°F	
Label	3	3
Hazard code		
UN Number	1950	1950
Page code		2102
EMS		2-13
MFAG		620
Packing Group	II	II

15 – REGULATORY INFORMATION

Classification : Extremely flammable.
Symbol : F
Ingredients : Contains Liquefied Petroleum Gas.
Contains Mineral Oil.
Mandatory Risk Phrases : R12 Extremely flammable.
Mandatory Safety Phrases : N/A
Recommended Safety Phrases :
S16 Keep away from sources of ignition – No Smoking.
S23 Do not breathe vapour/spray.
S24 Avoid contact with skin.
S51 Use only in well ventilated areas.

16 – OTHER INFORMATION

R12 Extremely flammable.

This sheet completes the technical user manual but does not replace it. The information is based on our knowledge of the product. It is given in good faith. The attention is drawn to unplanned use of the product. The information does not exempt the user from knowing and applying the regulatory information concerning his activity. It is the users own responsibility to take the precautions linked to his/her use of the product. The mentioned regulatory prescriptions goal is to help the receiver to fulfil his/her obligations when using a hazardous product. This listing should not be considered as exhaustive and it does not exempt the user from insuring himself/herself of other eventual requirements concerning possessing and manipulation of the product for which the user is alone responsible.

DIRECTIVE 2001/58/EC OF 27/07/2001 INDICE : B DATE: AUGUST 2003
FIDE 011&